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ISO-9002 Certified

DIP Power Inductors

MBPL Series

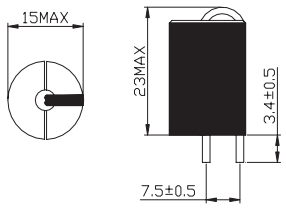
PRODUCT IDENTIFICATION

MBPL □□□ □- □□□- □ □

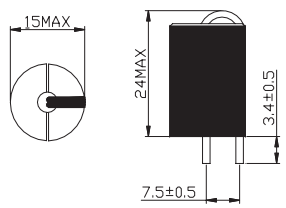
- Internal No.
- Tolerance
- Inductance
- Packaging(B:bulk)
- Dimensions
- Product Symbol

SHAPE AND DIMENSIONS

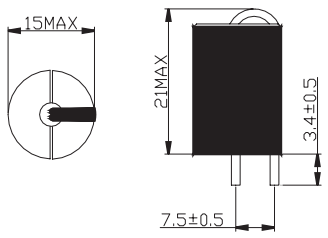
MBPL1319



MBPL1220



MBPL1217



Dimensions : mm

FEATURES

- Magnetic shielded construction for high density board assembly
- High performance execllent DC current characteristics
- Large energy storage capacity
- Up to 40 amps continuous
- Custom designs available

ELECTRICAL CHARACTERISTICS MBPL SERIES

PART NO.	INDUCTANCE at (μH)	TOLERANCE (±%)	TEST FREQUENCY (KHZ)	SER (KHZ) MIN.	DC RESISTANCE (mΩ)MAX	RATED CURRENT (A)MIN
MBPL1319B-R30M-N	0.30	20%	100		0.5	60
MBPL1319B-R60M-N	0.60	20%	100		1.0	60
MBPL1319B-R90M-N	0.90	20%	100		1.0	40
MBPL1319B-1R2M-N	1.20	20%	100		1.0	35
MBPL1220B-1R2M-N	1.20	20%	100		1.8	30
MBPL1220B-1R5M-N	1.50	20%	100		1.8	40
MBPL1217B-R30M-N	0.30	20%	100		0.7	45
MBPL1217B-R60M-N	0.60	20%	100		1.5	40
MBPL1217B-R90M-N	0.90	20%	100		1.5	30

Note: * at 25MHZ ** at 7.9MHZ

When ordering please specify tolerance and packaging code.

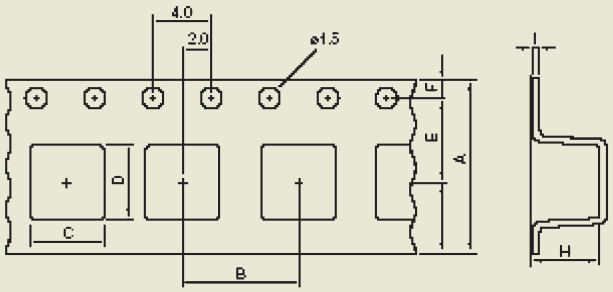
Ex : PMC129- R60M-S Tolerance: M±20%, L±15%, K±10% Packaging: Clear Tape and Reel (Standard)

L Q :HP4287A SRF :HP8753D/E4991A RDC: Digital Multimeter SC-7401

Operating Temperature °C Range -40°C to +125°C

TAPE DIMENSIONS

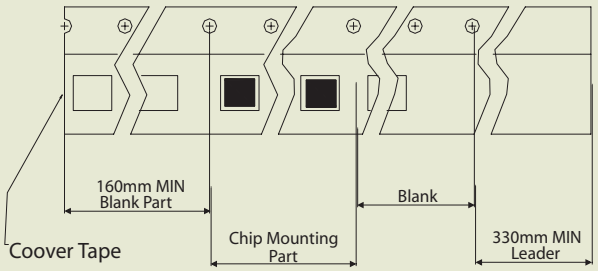
Dimensions : mm



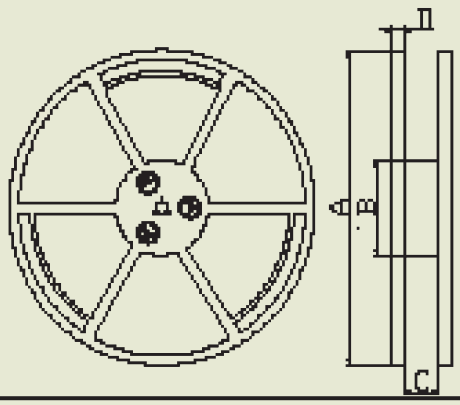
TAPE MATERIAL

Carrier Tape : Polystyrene

Cover Type : Polyethylene

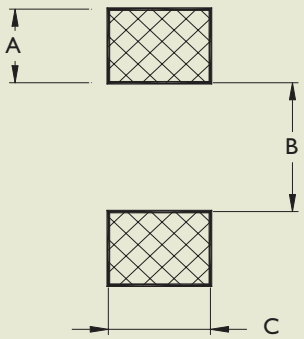


REEL DIMENSIONS



RECOMMENDED PATTERN

Land Pattern



Dimensions : mm

TYPE	TAPE DIMENSIONS						REEL DIMENSIONS			RECOMMENDED PATTERN			QUANTITY /REEL
	A	B	C	D	E	H	A	B	C	A	B	C	
PMC129	32	20	13.9	13.9	14.2	11.5	330	100	32.5	4	6	6.2	250
PMC127	32	20	13.9	13.9	14.2	9	330	100	32.5	4	6	6.2	250
PMC125	32	20	13.9	13.9	14.2	7	330	100	32.5	4	6	6.2	300

PMC SERIES RELIABILITY TEST

1-1 MECHANICAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-1-1	Vibration	Appearance :No Damage L Change :within±10% Q Change :within±30% RDC:within Specificadion	Test device shall solderd on the substrate Oscillation frequency:10 to 50 to 10HZ for IMin Amplitude : 1.5mm Time :2Hrs,for each Axis (X,Y&Z),Total 6Hrs
1-1-2	Resistance to Soldering Heat	Appearance :No Damage	Pre-heating: 150°C , IMin. Solder Composition: Sn/Pb=63/37 Solder Temperature: 260±5°C Immersion Time: 10 ±ISec.
1-1-3	Solderability	The electrodes shall be at least 90% covered with new solder coating.	Pre-heating: 150°C , IMin. Solder Composition: Sn/Pb=63/37 Solder Temperature: 230±5°C Immersion Time: 4 ISec.

1-2 ENVIRONMENTAL PERFORMANCE

NO	ITEM	SPECIFICATION	TEST CONDITIONS
1-2-1	Temperature Shock	Appearance: No Damage L Change: within ±10% L Change: within ± 30% RDC: within Specifiлcation	10 Cycles (Air to Air) 1 Cycles shall Consist of: 30Min.Exposure to -55°C 30Min.Exposure to -125°C 15Sec.Max.Transition between Temperatures Measured after Exposure in the Room Condition for 24Hrs.
1-2-2	Temperature Cycle		One Cycle

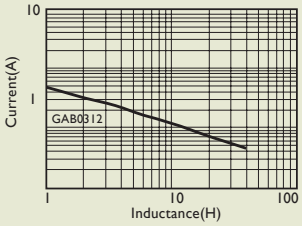
Step	Temperature(°C)	Time (Min.)
1	-25±3	30
2	25±2	3
3	85±3	30
4	25±2	3

			Total: 100Cycles Measured after Exposure in the Room Condition for 24Hrs.
1-2-3	Humidity Resistance		Temperature: 40±2°C Relative Humidity: 90~95% Time: 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-4	High Temperature Resistance		Temperature: 85±3°C Relative Humidity: 20% Applied Current: Rated Current Time: 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-5	Low Temperature Resistance		Temperature: -253°C Relative Humidity: 0% Time: 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.

GAB0312 Series

Mini Power Inductors

TYPICAL ELECTRICAL CHARACTERISTICS CURVE



TEST INSTRUMENT:HP 4285A, Zentech 301A

INDUCTANCE-CURRENT (REFERENCE)

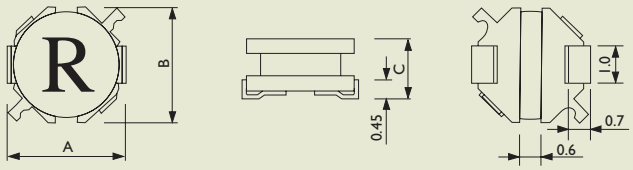
ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

P/N	Inductance L(μH)[1]	DCR (Ω) ±20%	IDC (A) MAX.[2]	Marking
GAB0312T-1R0N-N	1.0±30%	0.08	1.40	A
GAB0312T-1R8N-N	1.8±30%	0.11	1.10	C
GAB0312T-2R2N-N	2.2±30%	0.12	1.00	D
GAB0312T-2R7N-N	2.7±30%	0.15	0.95	E
GAB0312T-4R7N-N	4.7±30%	0.28	0.75	H
GAB0312T-5R6N-N	5.6±30%	0.31	0.68	I
GAB0312T-6R8N-N	6.8±30%	0.36	0.62	K
GAB0312T-7R5N-N	7.5±30%	0.39	0.60	L
GAB0312T-100M-N	10±20%	0.43	0.53	M
GAB0312T-150M-N	15±20%	0.72	0.44	O
GAB0312T-220M-N	22±20%	1.18	0.33	R
GAB0312T-330M-N	33±20%	1.90	0.26	T
GAB0312T-470M-N	47±20%	2.45	0.23	V
GAB0312T-680M-N	68±20%	4.20	0.17	X

1. Test Frequency 100KHZ 0.1Vrms.
2. DC Current at which the Inductance Drops 30%(typ) from its value without Current.
3. Operating Temperature Range -40°C to 85°C
4. Tolerance : M : ±20% , N : ±30%
5. Packaging : Clear Tape and Reel (Standard)

SHAPE AND DIMENSIONS

Dimensions : mm



Parts/reel:
7" 1500pcs

Tape width:
12mm

TYPE	A	B	C
GAB0312	3.2±0.3	3.2±0.3	1.2MAX

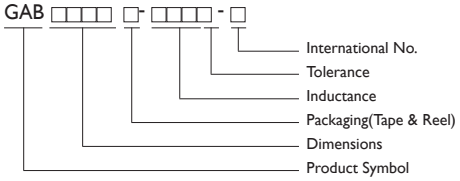
FEATURES

- Low profile 1.2mm max.
- Maximun currentrating of 1.4Amps.
- Density design, small size, and low cost.

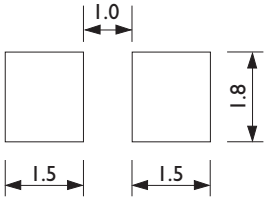
APPLICATIONS

- DC /DC converter
- Camcorder
- LCD TV
- MP3 - player
- Digital camera
- G.P.S
- Portable CDR-W
- PDA (desktop)

PRODUCT IDENTIFICATION



LAND PATTERNS PCB



Mini Power Inductors

NDA Series

(NDA0715)

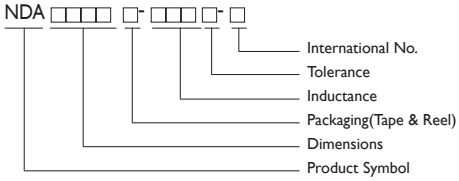
FEATURES

- Excellent property with high saturation for surface mounting
- Magnetically shielded & low radiation.
- Large rated current 2.5A max.
- low profile less than 1.5mm.

APPLICATIONS

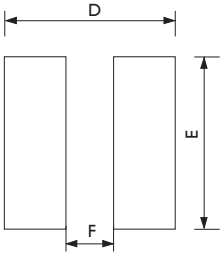
- DC-DC converter
- LCD monitor
- Digital video and still cameras.
- Digital camera.
- Harddisk drivers and others.

PRODUCT IDENTIFICATION



LAND PATTERNS PCB

Dimensions : mm



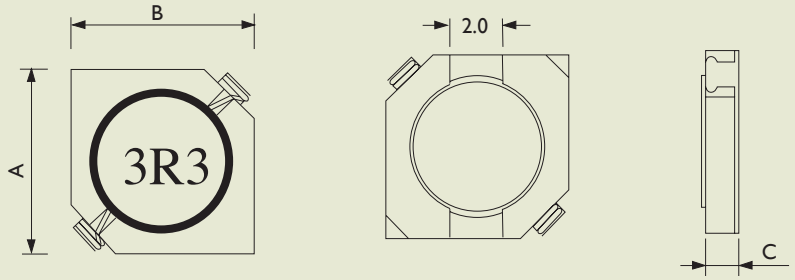
ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

P/N	Inductance L(μH)±20[1]	DCR (Ω) MAX.	IDC (A) MAX.[2]
NDA0715T-1R6 -N	1.60	0.045	2.50
NDA0715T-2R2 -N	2.20	0.065	2.00
NDA0715T-2R6 -N	2.60	0.075	1.80
NDA0715T-3R0 -N	3.00	0.085	1.70
NDA0715T-3R3 -N	3.30	0.096	1.60
NDA0715T-3R6 -N	3.60	0.110	1.50
NDA0715T-4R7 -N	4.70	0.130	1.30
NDA0715T-470 -N	47.0	0.650	0.45

1. Test Frequency 100KHZ / 0.1Vrms.
2. DC current at which the Inductance drops 20%(typ) from its value without current.
3. Operating Temperature Range -40°C to 85°C
4. Tolerance : M : 20% , N : 30%
5. Packaging : Clear Tape and Reel (Standard)

SHAPE AND DIMENSIONS

Dimensions : mm



TYPE	A	B	C	D	E	F
NDA0715	7.0±0.2	7.0±0.2	1.5MAX	7.3	7.3	2.0

NDA Series

Mini Power Inductors

(NDA1015)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

P/N	Inductance L(μH)±20[1]	DCR (Ω) MAX.	IDC (A) MAX.[2]
NDA0715T-1R6 -N	1.60	0.045	2.50
NDA0715T-2R2 -N	2.20	0.065	2.00
NDA0715T-2R6 -N	2.60	0.075	1.80
NDA0715T-3R0 -N	3.00	0.085	1.70
NDA0715T-3R3 -N	3.30	0.096	1.60
NDA0715T-3R6 -N	3.60	0.110	1.50
NDA0715T-4R7 -N	4.70	0.130	1.30
NDA0715T-470 -N	47.0	0.650	0.45

1. Test Frequency 100KHZ / 0.1Vrms.
2. DC current at which the Inductance drops 20%(typ) from its value without current.
3. Operating Temperature Range -40°C to 85°C
4. Tolerance : M : 20% , N : 30%
5. Packaging : Clear Tape and Reel (Standard)

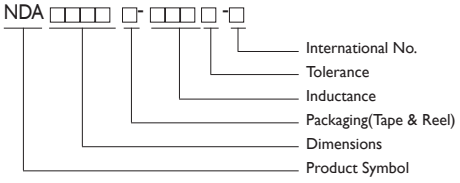
FEATURES

- Excellent property with high saturation for surface mounting
- Magnetically shielded & low radiation.
- Large rated current 3.0A max.
- low profile less than 1.5mm.

APPLICATIONS

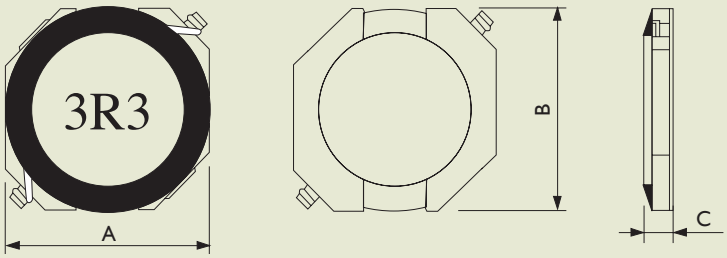
- DC-DC converter
- LCD monitor
- Digital video and still cameras.
- Digital camera.
- Harddisk drivers and others.

PRODUCT IDENTIFICATION



SHAPE AND DIMENSIONS

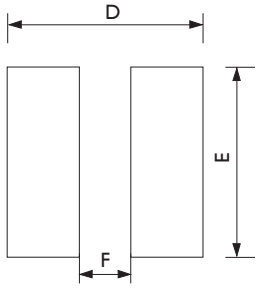
Dimensions : mm



TYPE	A	B	C	D	E	F
NDA1015	10.3MAX	10.3MAX	1.5MAX	10.4	10.4	3.0

LAND PATTERNS PCB

Dimensions : mm



Mini Power Inductors

NAN Series

(NAN0610)

FEATURES

Very low profile.

Constructed enclosed in a arugged to provide optimum pick and place operations.

High inductance & high cuttent ultra ow profile power inductors.

APPLICATIONS

DC to DC converter

LCD

Mobile telephone

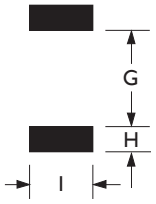
PRODUCT IDENTIFICATION

NAN □□□□ □-□□□□-□

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

LAND PATTERNS PCB

Dimensions : mm



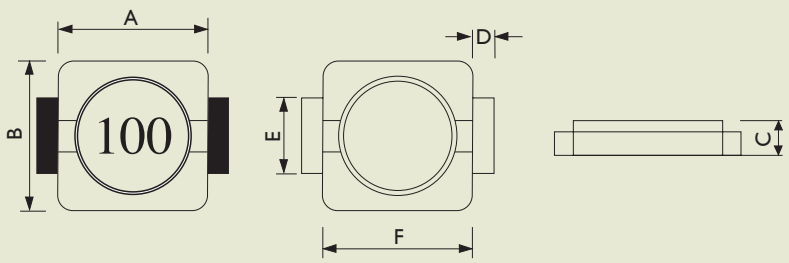
ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance L(μH)[1]	DCR (Ω) MAX.	IDC (mA) MAX.[2]
NAN0610T-1R2M-N	1.20	0.08	2100
NAN0610T-1R5M-N	1.50	0.10	1900
NAN0610T-2R2M-N	2.20	0.12	1600
NAN0610T-3R3M-N	3.30	0.16	1300
NAN0610T-4R7M-N	4.70	0.20	1100
NAN0610T-6R8M-N	6.80	0.32	900
NAN0610T-100M-N	10.0	0.41	800
NAN0610T-150M-N	15.0	0.55	650
NAN0610T-220M-N	22.0	0.85	500
NAN0610T-330M-N	33.0	1.30	400
NAN0610T-470M-N	47.0	1.80	350
NAN0610T-680M-N	68.0	2.50	300
NAN0610T-101M-N	100	3.50	250
NAN0610T-151M-N	150	5.00	180
NAN0610T-221M-N	220	7.00	160
NAN0610T-331M-N	330	15.0	130

1. Test Frequency 100KHZ / 0.1Vrms.
2. DC current at which the Inductance drops 10%(typ) from its value without current.
3. Operating Temperature Range -40°C to 85°C
4. Electrlcal speclfication at 25°C
5. Inductance : M : ±20%

SHAPE AND DIMENSIONS

Dimensions : mm



TYPE	A	B	C	D	E	F	G	H	I
NAN0610	6.5MAX	5.3±0.3	1.0MAX	0.9	3.0	4.5	4.0	1.0	2.3

NAN Series

Mini Power Inductors

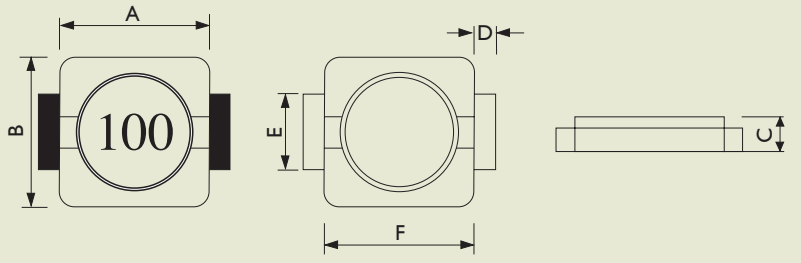
ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance L(μH)[1]	DCR (Ω) MAX.	IDC (mA) MAX.[2]
NAN0612T-1R2M-N	1.20	0.060	1800
NAN0612T-2R2M-N	2.20	0.125	1200
NAN0612T-3R3M-N	3.30	0.155	960.0
NAN0612T-4R7M-N	4.70	0.206	900.0
NAN0612T-6R8M-N	6.80	0.240	800.0
NAN0612T-100M-N	10.0	0.370	700.0
NAN0612T-150M-N	15.0	0.460	600.0
NAN0612T-180M-N	18.0	0.580	560.0
NAN0612T-220M-N	22.0	0.668	500.0
NAN0612T-270M-N	27.0	0.950	450.0
NAN0612T-330M-N	33.0	1.100	420.0
NAN0612T-390M-N	39.0	1.280	380.0
NAN0612T-470M-N	47.0	1.380	340.0
NAN0612T-560M-N	56.0	1.700	300.0
NAN0612T-680M-N	68.0	2.100	280.0
NAN0612T-820M-N	82.0	2.700	260.0
NAN0612T-101M-N	100.0	3.100	235.0

1. Test Frequency 100KHZ / 0.1Vrms.
2. DC current at which the Inductance drops 10%(typ) from its value without current.
3. Operating Temperature Range -40°C to 85°C
4. Electrlcal speclfication at 25°C
5. Inductance : M : ±20%

SHAPE AND DIMENSIONS

Dimensions : mm



TYPE	A	B	C	D	E	F	G	H	I
NAN0612	6.6	5.3±0.3	1.2	0.9	3.0	4.5	4.0	1.0	2.3

(NAN0612)

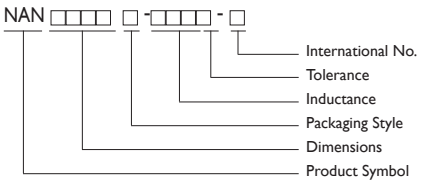
FEATURES

- Very low profile.
- Constructed enclosed in a arugged to provide optimum pick and place operations.
- High inductance & high cuttent ultra ow profile power inductors.

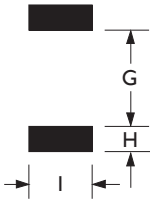
APPLICATIONS

- DC to DC converter
- LCD
- Mobile telephone

PRODUCT IDENTIFICATION



LAND PATTERNS PCB



Mini Power Inductors

NAN Series

(NAN0620)

FEATURES

Very low profile.

Constructed enclosed in a arugged to provide optimum pick and place operations.

High inductance & high cuttent ultra ow profile power inductors.

APPLICATIONS

DC to DC converter

LCD

Mobile telephone

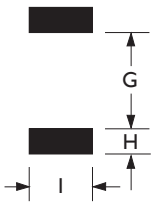
PRODUCT IDENTIFICATION

NAN □□□□ □-□□□□-□

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

LAND PATTERNS PCB

Dimensions : mm



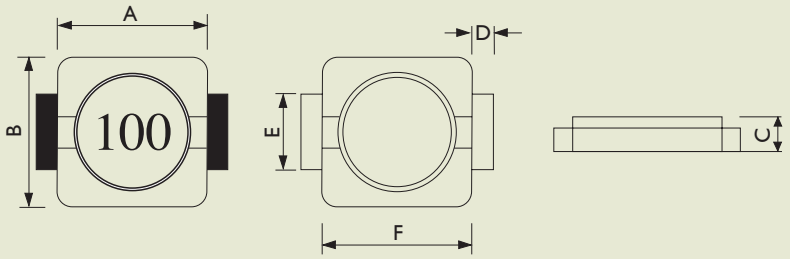
ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance L(μH)[1]	DCR (Ω) MAX.	IDC (mA) MAX.[2]
NAN0620T-1R0M-N	1.00	0.04	2500
NAN0620T-1R5M-N	1.50	0.06	2200
NAN0620T-2R2M-N	2.20	0.07	1800
NAN0620T-3R3M-N	3.30	0.11	1400
NAN0620T-4R7M-N	4.70	0.12	1200
NAN0620T-6R8M-N	6.80	0.19	1100
NAN0620T-100M-N	10.0	0.30	1000
NAN0620T-150M-N	15.0	0.40	800
NAN0620T-220M-N	22.0	0.54	600
NAN0620T-330M-N	33.0	0.74	500
NAN0620T-470M-N	47.0	1.10	450
NAN0620T-680M-N	68.0	1.60	350
NAN0620T-101M-N	100	2.30	300
NAN0620T-151M-N	150	3.20	250
NAN0620T-221M-N	220	5.70	200
NAN0620T-331M-N	330	8.20	160
NAN0620T-471M-N	470	10.8	140
NAN0620T-681M-N	680	17.2	120
NAN0620T-102M-N	100.0	22.6	80

1. Test Frequency 100KHZ / 0.1Vrms.
2. DC current at which the Inductance drops 10%(typ) from its value without current.
3. Operating Temperature Range -40°C to 85°C
4. Electrlcal speclfication at 25°C
5. Inductance : M : °20%

SHAPE AND DIMENSIONS

Dimensions : mm



TYPE	A	B	C	D	E	F	G	H	I
NAN0620	6.5MAX	5.3±0.3	2.0MAX	0.9	3.0	4.5	4.0	1.0	2.3

NAS Series

SMD Power Inductors

(NAS0615)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance L(μH)±20[1]	DCR (Ω) MAX.	IDC (A) MAX.[2]
NAS0615T-1R6M-N	1.6	0.045	2.5
NAS0615T-2R2M-N	2.2	0.065	2.0
NAS0615T-2R6M-N	2.6	0.075	1.8
NAS0615T-3R0M-N	3.0	0.085	1.7
NAS0615T-3R3M-N	3.3	0.096	1.6
NAS0615T-3R6M-N	3.6	0.110	1.5
NAS0615T-4R7M-N	4.7	0.130	2.0

1. Test Frequency 100KHZ / 0.1Vrms.
2. Inductance drops 20%(typ) at rated Isat.
3. Operating Temperature Range -40°C to 85°C
4. Inductance : M : ±20%

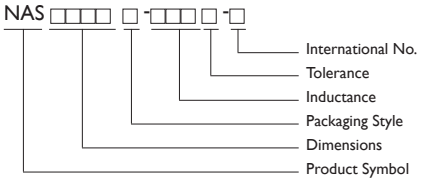
FEATURES

- Magentically shielded and low radiation
- Very low DCR & better Q factor
- Flat bottom for reliable surface mounting
- Density design, small size, and low cost

APPLICATIONS

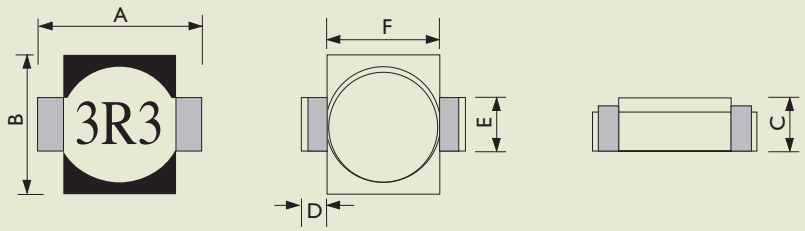
- Mobile telephone.
- Step-up or step-down converters.
- Flash memory.

PRODUCT IDENTIFICATION



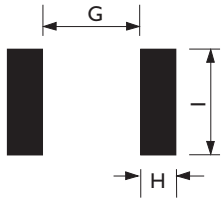
SHAPE AND DIMENSIONS

Dimensions : mm



TYPE	A	B	C	D	E	F	G	H	I
NAS0615	6.50MAX	5.3±0.3	1.5MAX	0.9	2.6	4.5	4.06	1.40	3.56

LAND PATTERNS PCB



SMD Power Inductors

NAS Series

(NAS0620)

FEATURES

- Magentically shielded and low radiation
- Very low DCR & better Q factor
- Flat bottom for reliable surface mounting
- Density design, small size, and low cost

APPLICATIONS

- Mobile telephone.
- Step-up or step-down converters.
- Flash memory.

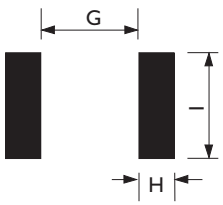
PRODUCT IDENTIFICATION

NAS □□□□ □ -□□□ □ -□

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

LAND PATTERNS PCB

Dimensions : mm



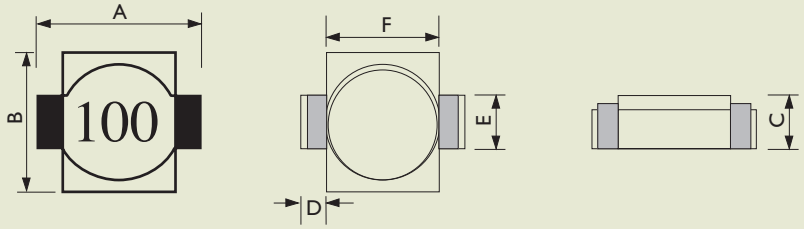
ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	L(μH)±20%[1]	Q MIN	DCR (Ω) max	SRF typ(MHz)	IDC (A) MAX.[2]
NAS0620T-1R0M-N	1.00	30 @200KHZ	0.040	250	3.00
NAS0620T-1R5M-N	1.50	30 @200KHZ	0.045	125	2.80
NAS0620T-2R2M-N	2.20	40 @200KHZ	0.05	120	1.80
NAS0620T-3R2M-N	3.30	40 @200KHZ	0.055	120	1.60
NAS0620T-4R7M-N	4.70	40 @200KHZ	0.060	105	1.40
NAS0620T-6R8M-N	6.80	40 @200KHZ	0.065	50	1.20
NAS0620T-100M-N	10.0	40 @200KHZ	0.075	38	1.00
NAS0620T-150M-N	15.0	40 @200KHZ	0.090	33	0.80
NAS0620T-220M-N	22.0	40 @200KHZ	0.110	25	0.70
NAS0620T-330M-N	33.0	40 @200KHZ	0.190	20	0.60
NAS0620T-470M-N	47.0	40 @200KHZ	0.230	20	0.50
NAS0620T-680M-N	68.0	40 @200KHZ	0.290	15	0.40
NAS0620T-101M-N	100	40 @200KHZ	0.480	10	0.30
NAS0620T-151M-N	150	40 @200KHZ	0.590	9	0.26
NAS0620T-221M-N	220	40 @200KHZ	0.770	6	0.22
NAS0620T-331M-N	330	40 @200KHZ	1.400	5	0.20
NAS0620T-471M-N	470	40 @200KHZ	1.800	4	0.19
NAS0620T-681M-N	680	40 @200KHZ	2.200	3	0.18
NAS0620T-102M-N	1000	40 @200KHZ	3.400	2	0.15
NAS0620T-152M-N	1500	50 @200KHZ	4.200	2	0.12
NAS0620T-222M-N	2200	50 @200KHZ	8.500	2	0.10
NAS0620T-332M-N	3300	50 @200KHZ	11.00	1	0.08
NAS0620T-472M-N	4700	50 @200KHZ	13.90	1	0.06
NAS0620T-682M-N	6800	50 @200KHZ	25.00	1	0.04
NAS0620T-103M-N	10000	50 @200KHZ	32.80	0.8	0.02

1. Inductance tested at 0.1Vrms, 100KHZ..
2. 30°C Temperature rise.
3. Operating Temperature Range -40°C to 85°C
4. Electrlcal speclfication at 25°C
5. Inductance : M : ±20%

SHAPE AND DIMENSIONS

Dimensions : mm



TYPE	A	B	C	D	E	F	G	H	I
NAS0620	6.50MAX	5.3±0.3	2.0MAX	0.9	2.6	4.5	4.06	1.40	3.56

NAS Series

SMD Power Inductors

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	L(μH)±20%[1]	DCR (Ω) max	Insulation core-winding(MΩ)	SRF typ(MHz)	IDC (A) MAX.[2]
NAS0620BLT-101M-N	0.10	0.95	>10	12	220
NAS0620BLT-151M-N	0.15	1.40	>10	10	200
NAS0620BLT-221M-N	0.22	1.70	>10	8	180
NAS0620BLT-331M-N	0.33	2.20	>10	6	160
NAS0620BLT-471M-N	0.47	3.80	>10	5	140
NAS0620BLT-681M-N	0.68	4.90	>10	4	120
NAS0620BLT-102M-N	1.00	9.00	>10	2	100
NAS0620BLT-152M-N	1.50	11.0	>10	1	80
NAS0620BLT-222M-N	2.20	19.0	>10	1	50
NAS0620BLT-332M-N	3.30	24.0	>10	1	40
NAS0620BLT-472M-N	4.70	30.0	>10	1	30
NAS0620BLT-682M-N	6.80	56.0	>10	0.9	20
NAS0620BLT-103M-N	10.0	74.0	>10	0.9	10

1. Inductance tested at 0.1Vrms, 100KHZ..
2. 30°C Temperature rise.
3. Operating Temperature Range -40°C to 85°C
4. Electrlcal speclfication at 25°C
5. Inductance : M : ±20%

(NAS0620BL)

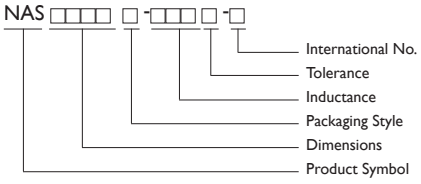
FEATURES

- Magentically shielded and low radiation
- Very low DCR & better Q factor
- Flat bottom for reliable surface mounting
- Density design, small size, and low cost

APPLICATIONS

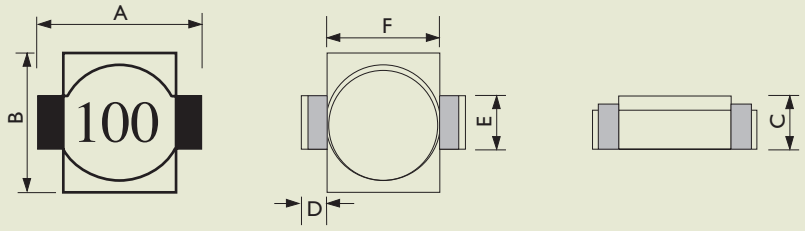
- Mobile telephone.
- Step-up or step-down converters.
- Flash memory.

PRODUCT IDENTIFICATION



SHAPE AND DIMENSIONS

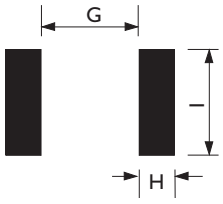
Dimensions : mm



TYPE	A	B	C	D	E	F	G	H	I
NAS0620BL	6.50MAX	5.3±0.3	2.0MAX	0.9	2.6	4.5	4.06	1.40	3.56

LAND PATTERNS PCB

Dimensions : mm



SMD Power Inductors

NAS Series

(NAS0630)

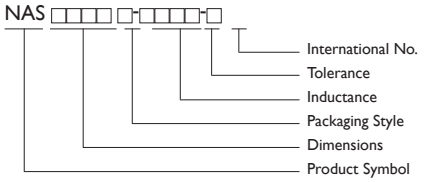
FEATURES

- Magentically shielded and low radiation
- Very low DCR & better Q factor
- Flat bottom for reliable surface mounting
- Density design, small size, and low cost

APPLICATIONS

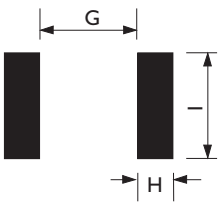
- Mobile telephone.
- Step-up or step-down converters.
- Flash memory.

PRODUCT IDENTIFICATION



LAND PATTERNS PCB

Dimensions : mm



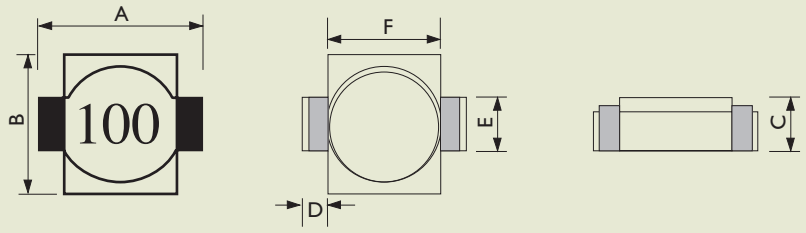
ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	L(µH)±20%[1]	Q MIN	DCR (Ω) max	SRF typ(MHz)	IDC (A) MAX.[2]
NAS0630T-1R0M-N	1.00	20 @200KHZ	0.042	250	3.00
NAS0630T-1R5M-N	1.50	30 @200KHZ	0.045	125	2.80
NAS0630T-2R2M-N	2.20	40 @200KHZ	0.050	120	1.80
NAS0630T-3R2M-N	3.30	40 @200KHZ	0.055	120	1.60
NAS0630T-4R7M-N	4.70	40 @200KHZ	0.060	105	1.40
NAS0630T-6R8M-N	6.80	40 @200KHZ	0.065	50	1.20
NAS0630T-100M-N	10.0	40 @200KHZ	0.075	38	1.00
NAS0630T-150M-N	15.0	40 @100KHZ	0.090	33	0.80
NAS0630T-220M-N	22.0	40 @100KHZ	0.110	25	0.70
NAS0630T-330M-N	33.0	40 @100KHZ	0.190	20	0.60
NAS0630T-470M-N	47.0	40 @100KHZ	0.230	20	0.50
NAS0630T-680M-N	68.0	40 @100KHZ	0.290	15	0.40
NAS0630T-101M-N	100	40 @100KHZ	0.480	10	0.30
NAS0630T-151M-N	150	40 @100KHZ	0.590	9	0.26
NAS0630T-221M-N	220	40 @100KHZ	0.770	6	0.22
NAS0630T-331M-N	330	40 @100KHZ	1.400	5	0.20
NAS0620T-471M-N	470	40 @100KHZ	1.800	4	0.19
NAS0630T-681M-N	680	40 @100KHZ	2.200	3	0.18
NAS0630T-102M-N	1000	40 @100KHZ	3.400	2	0.15
NAS0630T-152M-N	1500	50 @100KHZ	4.200	2	0.12
NAS0630T-222M-N	2200	50 @100KHZ	8.500	2	0.10
NAS0630T-332M-N	3300	50 @100KHZ	11.00	1	0.08
NAS0630T-472M-N	4700	50 @100KHZ	13.90	1	0.06
NAS0630T-682M-N	6800	50 @100KHZ	25.00	1	0.04
NAS0630T-103M-N	10000	50 @100KHZ	32.80	0.8	0.02

1. Inductance tested at 0.1Vrms, 100KHZ..
2. 30°C Temperature rise.
3. Operating Temperature Range -40°C to 85°C
4. Electrical specification at 25°C
5. Inductance : M : ±20%

SHAPE AND DIMENSIONS

Dimensions : mm



TYPE	A	B	C	D	E	F	G	H	I
NAS0630	6.50MAX	5.3±0.3	3.0MAX	0.9	2.6	4.5	4.0	1.40	3.56

FV0705 Series

SMD Power Inductors

APPLICATIONS

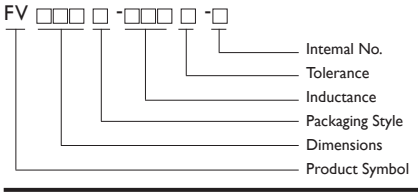
- PDA/Notebook/Desktop/Server applications.
- High current POL converters.
- Low profile, high current power supplies.
- Battery powered devices
- DC/DC converters in distributed power systems.
- DC/DC converter for Field Programmable Gate Array(FPGA).

FEATURES

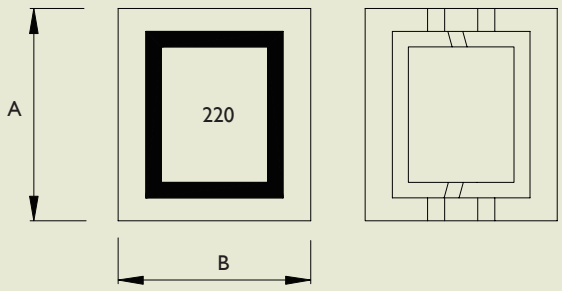
- Lowest height(5.5mm) in this package footprint.
- Shielded construction.
- Frequency range up to 5.0MHz.
- Lowest DCR/uH, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.
- 100% lead(Pb) free

• Tolerance :G=±2%, J=±5%, K=±10%

PRODUCT IDENTIFICATION



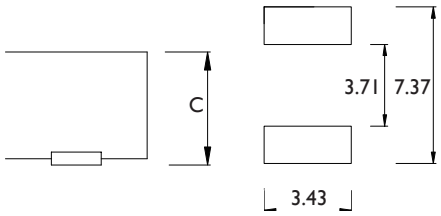
SHAPES AND DIMENSIONS



TYPE	A	B	C(MAX)
FV0705	6.86±0.38	6.47±0.25	5.5

LAND PATTERNS

Dimensions : mm



ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	L(μH)±20%	DCR MAX(Ohms)	IDC²(A)MAX
FV0705T-R10M-N	0.10	0.0017	30.0
FV0705T-R22M-N	0.22	0.0032	21.0
FV0705T-R33M-N	0.33	0.0041	18.0
FV0705T-R47M-N	0.47	0.0065	13.5
FV0705T-R68M-N	0.68	0.0094	11.0
FV0705T-R82M-N	0.82	0.0118	10.0
FV0705T-1R0M-N	1.00	0.0142	9.00
FV0705T-1R5M-N	1.50	0.0212	7.50
FV0705T-2R2M-N	2.20	0.0340	6.50
FV0705T-3R3M-N	3.30	0.0516	5.00
FV0705T-4R7M-N	4.70	0.0630	4.50
FV0705T-6R8M-N	6.80	0.0950	3.50
FV0705T-8R2M-N	8.20	0.1060	3.00
FV0705T-100M-N	10.0	0.1290	2.50

1.Inductance tested at 0.1 Vms, 100KHz..
2.40C temperature rise, DC current at which the inductance drops 20%(typ) from its value without current.
3.Operating temperature range -40°C to 85°C
4. Electrical specifications at 25°C
5.Inductance : M=±20%

SCD Series

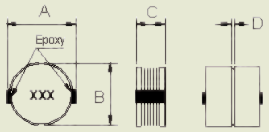
SMT Power Inductors

SHAPES AND DIMENSIONS

Dimensions : mm

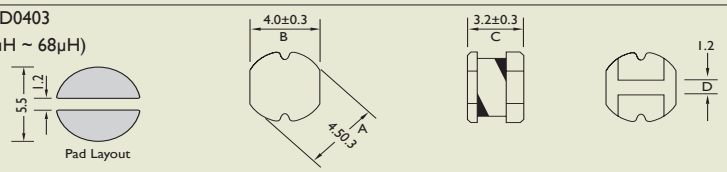
TYPE DIMENSION

SCD0301
(1μH ~ 68μH)



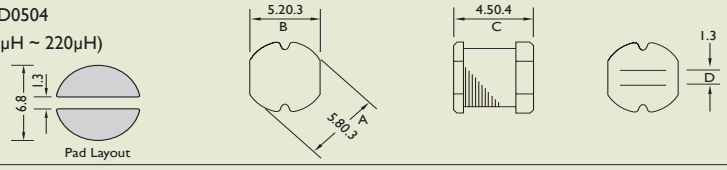
TYPE	A	B	C	D
SCD0301	3.5	3.0	1.0	0.6TYP

SCD0403
(1μH ~ 68μH)

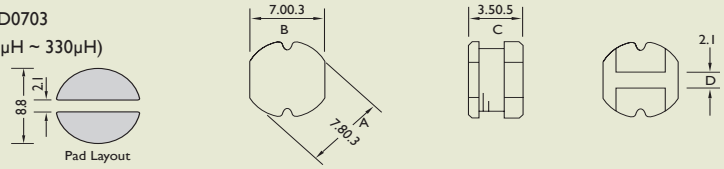


Dimensions in mm	2.2H~1500H	1.0H~1000H	1.0H~1000H	1.0H~1000H	1.0H~1000H
Dim.	SCD 0301	SCD 03015	SCD 03021	SCD 0501	SCD 0502	SCD 0503
A	3.5+0	3.3±0.3	3.3±0.3	5.8±0.3	5.8±0.3	5.8±0.3
B	3.0+0	3.0±0.3	3.0±0.3	5.2±0.3	5.2±0.3	5.2±0.3
C	1.0+0	1.5±0.3	2.1±0.3	2.2Max.	2.5±0.3	3±0.3
D	0.6TYP.	1.0TYP.	1.0TYP.	2.0TYP.	2.0TYP.	2.0TYP.

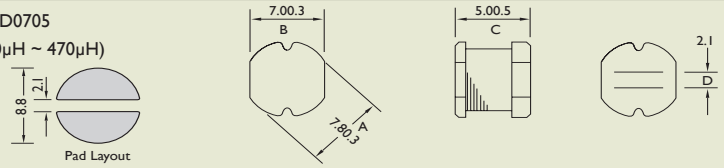
SCD0504
(10μH ~ 220μH)



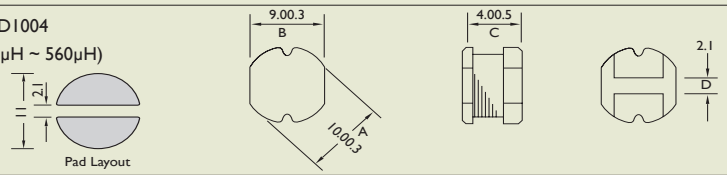
SCD0703
(10μH ~ 330μH)



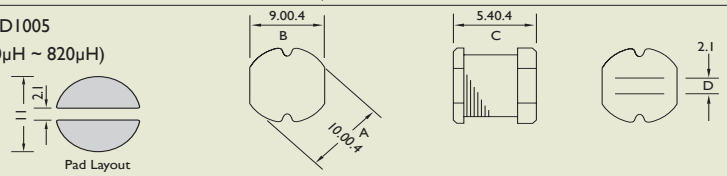
SCD0705
(10μH ~ 470μH)



SCD1004
(10μH ~ 560μH)



SCD1005
(10μH ~ 820μH)



FEATURES

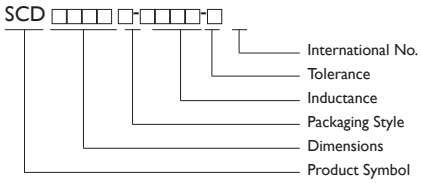
High saturation for surface mounting

Various high power surface montable type inductors are superior to high saturation. These are also magnetic shielding type for consideration against radiation.

APPLICATION

VRT, OA equipment, LCD television set, notebook computer, protable communications equipment,DC/DC converters, etc.

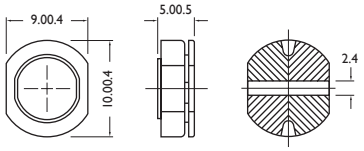
PRODUCT IDENTIFICATION



- Packing : T : Tape and Reel
- Tolerance : K±10%;M±20%
- Note : YAGEO will start to release SCD Series inductor with lead-free terminals that meet SONY SS-00259's criterial for lead-free product in Q2 of 2004, and YAGEO Internal No will changed to "N" as identification. Ex. SCD0403T-1R0-N

SCDR105B

(10μH ~ 470μH)



SCD STANDARD SPECIFICATIONS

Electrical Characteristics

Standard Specifications

Stamp	Inductance	D.C.R(Ω)Max.												
	(μH)	SCD 0301	SCD 03015	SCD 03021	SCD 0403	SCD 0501	SCD 0502	SCD 0503	SCD 0504	SCD 0703	SCD 0705	SCD 1004	SCD 1005	SCDR 1005B
1R0	1.0			2.080	3.80	4.00	4.50	4.50			3.70			
1R2	1.2							4.20						
1R4	1.4			1.860	3.30	3.60	4.00				3.70			
1R5	1.5							4.10						
1R8	1.8			1.800	2.91	3.00	3.30	3.70			3.70			
2R2	2.2	1.08	0.79	1.390	2.60	2.65	2.94	3.50						
2R7	2.7			1.320	2.43	2.20	2.50	3.20			3.70			
3R3	3.3	0.92		1.250	2.15	2.11	2.35	2.80						
3R9	3.9			1.200	1.98	2.00	2.20	2.60			3.70			
4R7	4.7	0.74	0.65	1.130	1.70	1.80	2.00	2.50			3.50		2.60	
5R6	5.6			0.910	1.60	1.60	1.80	2.40			3.30			
6R8	6.8	0.63		0.850	1.41	1.50	1.70	2.20			3.10		4.33	
8R2	8.2	0.58		0.820	1.26	1.30	1.40	2.00			2.70			
100	10	0.5	0.45	0.740	1.15	1.10	1.20	1.80	1.44	1.44	2.30	2.38	2.60	2.06
120	12	0.46		0.640	1.05	1.05	1.18	1.75	1.40	1.39	2.00	2.13	2.45	1.94
150	15	0.45	0.30	0.600	0.92	1.00	1.15	1.70	1.30	1.24	1.80	1.87	2.27	1.72
180	18			0.540	0.84	0.95	1.10	1.60	1.23	1.12	1.60	1.73	2.15	1.58
220	22	0.35	0.25	0.500	0.76	0.90	1.00	1.50	1.11	1.07	1.50	1.60	1.95	1.42
270	27	0.32		0.430	0.71	0.77	0.86	1.40	0.97	0.94	1.30	1.44	1.76	1.32
330	33		0.20	0.400	0.64	0.68	0.76	1.10	0.88	0.85	1.20	1.26	1.50	1.16
390	39			0.370	0.59	0.67	0.75	1.00	0.80	0.74	1.10	1.20	1.37	1.10
470	47		0.17	0.360	0.54	0.66	0.73	0.90	0.72	0.68	1.10	1.10	1.28	1.00
500	50			0.330		0.61								
560	56			0.310	0.50	0.50	0.55	0.85	0.68	0.64	0.94	1.01	1.17	0.93
680	68		0.13	0.300	0.467	0.47	0.52	0.80	0.61	0.59	0.85	0.91	1.11	0.85
750	75			0.290		0.46								
820	82			0.280		0.45	0.50	0.65	0.58	0.54	0.78	0.85	1.00	0.79
101	100		0.10	0.250	0.40	0.36	0.40	0.60	0.52	0.51	0.72	0.74	0.97	0.72
121	120			0.200		0.32	0.36	0.58	0.48	0.49	0.66	0.69	0.89	0.63
151	150			0.190		0.270	0.30	0.43	0.40	0.40	0.58	0.61	0.78	0.55
181	180			0.170		0.230	0.26	0.41	0.38	0.36	0.51	0.56	0.72	0.50
221	220			0.160		0.220	0.25	0.38	0.35	0.31	0.49	0.53	0.66	0.47
271	270			0.140		0.190	0.21	0.35	0.29	0.29	0.42	0.45	0.57	0.41
301	300			0.135		0.180								
331	330			0.130		0.160	0.18	0.28	0.28	0.28	0.40	0.42	0.52	0.37
391	390			0.120		0.150	0.16	0.26	0.26		0.36	0.38	0.48	0.35
461	460			0.090		0.140								
471	470			0.084		0.135	0.15	0.20	0.12		0.34	0.35	0.42	0.33
561	560			0.080		0.130	0.14	0.19	0.10			0.32	0.33	
681	680			0.080		0.120	0.13	0.18	0.08				0.28	
821	820			0.070		0.063	0.07	0.15	0.05				0.24	
102	1000			0.060		0.045	0.05	0.13	0.03					
122	1200		0.05											
152	1500		0.03											

- SCD0301 22uH~27uH ±20%
- SCD03015 2.2~1500uH ±20%
- SCD03021 1.0~1000uH±20%
- SCD0403 1.0~27uH±20% 33~100uH±10%
- SCD0501 1.0~27uH±20% 33~1000uH±10%
- SCD0502 1.0~27uH±20% 33~1000uH±10%
- SCD0503 1.0~27uH±20% 33~1000uH±10%
- SCD0504 10~27uH ±20% ; 33~47uH±15% ; 56~220uH ±10%
- SCD0703 10~47uH±20% 56~330uH±10%
- SCD0705 1.4~47uH±20% 56~470uH±10%
- SCD1004 10~47uH±20% 56~560uH±10%
- SCD1005 4.7~39uH±20% 47~820uH±10%
- SCDR105B 10~27uH±20% ; 33~82uH±15% ; 100~470uH ±10%

*This indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition or D.C Current when at Δt=4°C whichever is lower.

SCD STANDARD SPECIFICATIONS

Electrical Characteristics

Standard Specifications

Stamp	Inductance	D.C.R(Ω)Max.												
	(μH)	SCD 0301	SCD 03015	SCD 03021	SCD 0403	SCD 0501	SCD 0502	SCD 0503	SCD 0504	SCD 0703	SCD 0705	SCD 1004	SCD 1005	SCDR 1005B
1R0	1.0			0.07	0.033	0.034	0.03	0.03			0.02			
1R2	1.2							0.03						
1R4	1.4			0.09	0.038	0.048	0.04				0.02			
1R5	1.5							0.03						
1R8	1.8			0.11	0.042	0.062	0.05	0.03			0.02			
2R2	2.2	0.33	0.10±30	0.13	0.047	0.064	0.06	0.03						
2R7	2.7			0.14	0.052	0.078	0.07	0.04			0.02			
3R3	3.3	0.52		0.17	0.058	0.097	0.08	0.05						
3R9	3.9			0.19	0.076	0.105	0.09	0.06			0.03			
4R7	4.7	0.62	0.15±30	0.21	0.094	0.134	0.14	0.07			0.04		0.040	
5R6	5.6			0.22	0.101	0.170	0.15	0.08			0.04			
6R8	6.8	0.87		0.25	0.117	0.187	0.16	0.09			0.04		0.037	
8R2	8.2	1		0.28	0.132	0.225	0.17	0.10			0.05			
100	10	1.14	0.30±30	0.32	0.182	0.255	0.18	0.12	0.10	0.08	0.07	0.05	0.060	0.06
120	12	1.44		0.35	0.210	0.292	0.20	0.13	0.12	0.09	0.08	0.06	0.070	0.07
150	15	1.6	0.58±30	0.40	0.235	0.360	0.22	0.15	0.14	0.10	0.09	0.07	0.080	0.07
180	18			0.48	0.338	0.430	0.25	0.18	0.15	0.11	0.10	0.08	0.090	0.08
220	22	1.9	0.71±30	0.58	0.378	0.492	0.35	0.22	0.18	0.13	0.11	0.09	0.100	0.08
270	27	2.85		0.65	0.522	0.603	0.45	0.26	0.20	0.15	0.12	0.10	0.110	0.10
330	33		1.10±30	0.80	0.540	0.796	0.56	0.33	0.23	0.17	0.13	0.12	0.120	0.11
390	39			0.90	0.587	0.897	0.69	0.42	0.32	0.22	0.16	0.15	0.140	0.12
470	47		1.30±30	1.19	0.844	1.020	0.72	0.50	0.37	0.25	0.18	0.17	0.170	0.14
500	50			1.22		1.040								
560	56			1.27	0.937	1.164	0.84	0.55	0.42	0.28	0.24	0.20	0.190	0.19
680	68		2.20±30	1.73	1.117	1.220	0.90	0.65	0.46	0.33	0.28	0.22	0.220	0.21
750	75			1.90		1.340								
820	82			1.99		1.570	1.20	0.80	0.60	0.41	0.37	0.25	0.25	0.28
101	100		3.50±30	2.52	2.000	1.800	1.30	0.90	0.70	0.48	0.43	0.34	0.35	0.34
121	120			2.90		2.000	1.38	1.00	0.93	0.54	0.47	0.40	0.40	0.37
151	150			3.36		2.80	1.81	1.30	1.10	0.75	0.64	0.54	0.47	0.51
181	180			5.10		3.15	1.95	1.50	1.38	1.02	0.71	0.62	0.63	0.57
221	220			5.80		4.40	3.00	2.00	1.57	1.20	0.96	0.72	0.73	0.78
271	270			7.80		6.40	3.20	2.50	1.85	1.31	1.11	0.95	0.97	0.87
301	300			8.10		6.75								
331	330			9.24		7.20	3.82	3.20	2.00	1.50	1.26	1.10	1.15	1.20
391	390			10.14		8.40	4.68	3.50	2.60		1.77	1.24	1.30	1.34
461	460			11.15		12.0								
471	470			11.48		12.4	5.10	4.20	3.00		1.96	1.53	1.48	1.50
561	560			19.49		13.0	8.50	4.50	4.19			1.90	1.90	
681	680			22.00		17.0	10.0	6.50	4.44				2.25	
821	820			23.98		19.5	12.0	7.50	5.12				2.55	
102	1000			28.80		24.0	18.0	8.00	10.00					
122	1200		38±30											
152	1500		55±30											

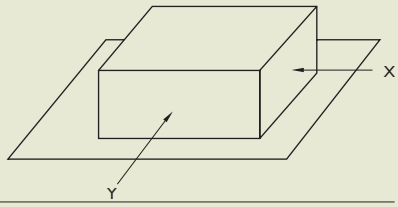
•Test Freq.(L): SCD0301 : 0.1V / 100KHz
SCD03015 : (1MHz / 1V)
SCD03021 / 0403 / 0501 / 0502 / 0503 : 1.0~8.2H(7.96MHz / 1V), 10~82H(2.52MHz / 1V), 100~1000(1KHz / 1V).
SCD0504 / 0705 / 1004 : 1.0~8.2H(7.96MHz / 1V), 10~82H(2.52MHz / 1V), 100~1000H(1KHz / 1V).
SCD1005 : 1.0~8.2H(7.96MHz / 1V), 10~82H (2.52MHz / 1V), 100~1000H(iKHz / 1V).
SCDR105B : 1.0~8.2H(2.52MHz / 0.25V), 10~82H(1KHz / 0.25V)

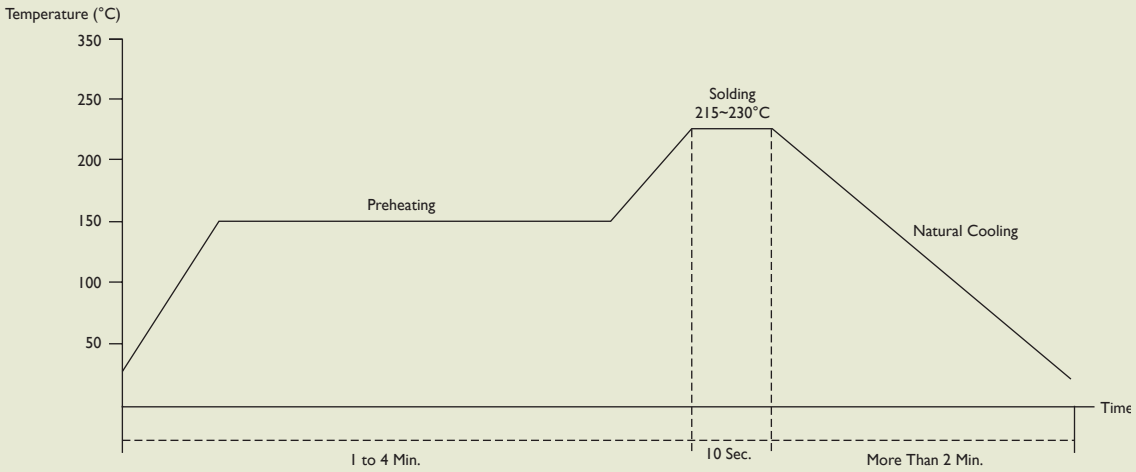
•Test Instrument : L: HP 4192A
DCR : CHEN HWA 502BC
Rated D.C Current : HP4294+42 841A or CH1061 +CH301A

GENERAL CHARACTERISTICS

Operating Temperature	-30 ~ +100°C (Contain Heading Coil)
Appearance Inspection	No External Defects by Visual Inspection
Terminal Strength	After soldering , between copper plate and terminals of coil , push in tow directions of X, Y with standing as blow conditions. Terminal should not peel off. (Refer to figure at right)
Heat Endurance of Reflow Soldering	Refer to Below Figure
Insulating Resistance	Over 100MΩ at 100V D.C. between wire and core.
Dielectric Strength	No dielectric breakdown at 100V D.C. for 1 minute between wire and core.
Temperature Characteristics	Inductance coefficient (0 ~ 2,000) X 10^{-6}/°C (-25 ~ +80°C)
Humidity Characteristics	Inductance deviation within ±5.0% , after 96 hours in 90 ~ 95% relative humidity at 40 ± 2°C and 1 hour drying under normal condition.
Vibration Resistance	Inductance deviation within ±5.0% , after vibration for 1 hour. In each of three orientations at sweep vibration (10 ~ 55 ~ 10Hz) with 1.5 mm p-p amplitude.

10.0N	10 Sec.	SCD0403	SCD0504
15.0N	10 Sec.	SCD0703	SCD0705
20.0N	10 Sec.	SCD1004	SCD1005





ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCD0301T-2R2 □-N	2.2	100KHz,0.1V	0.33	1.08
SCD0301T-3R3 □-N	3.3	100KHz,0.1V	0.52	0.92
SCD0301T-4R7 □-N	4.7	100KHz,0.1V	0.62	0.74
SCD0301T-6R8 □-N	6.8	100KHz,0.1V	0.87	0.63
SCD0301T-8R2 □-N	8.2	100KHz,0.1V	1	0.58
SCD0301T-100 □-N	10	100KHz,0.1V	1.14	0.5
SCD0301T-120 □-N	12	100KHz,0.1V	1.44	0.46
SCD0301T-150 □-N	15	100KHz,0.1V	1.6	0.43
SCD0301T-220 □-N	22	100KHz,0.1V	1.9	0.35
SCD0301T-270 □-N	27	100KHz,0.1V	2.85	0.32

NOTE : □-tolerance M=±20%

1.Operating temperature range -40°C~85°C

2.Inductance drop = 10% typ. at IDC

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCD03015T-2R2 □-N	2.2	1MHz,1V	0.10±30%	0.79
SCD03015T-3R3 □-N	3.3	1MHz,1V	0.11±30%	0.73
SCD03015T-4R7 □-N	4.7	1MHz,1V	0.15±30%	0.65
SCD03015T-100 □-N	10	1MHz,1V	0.30±30%	0.45
SCD03015T-150 □-N	15	1MHz,1V	0.58±30%	0.3
SCD03015T-220 □-N	22	1MHz,1V	0.71±30%	0.25
SCD03015T-330 □-N	33	1MHz,1V	1.10±30%	0.2
SCD03015T-390 □-N	39	1MHz,1V	1.30±30%	0.17
SCD03015T-470 □-N	47	1MHz,1V	1.30±30%	0.17
SCD03015T-680 □-N	68	1MHz,1V	2.20±30%	0.13
SCD03015T-101 □-N	100	1MHz,1V	3.50±30%	0.1
SCD03015T-122 □-N	1200	1MHz,1V	38±30%	0.05
SCD03015T-152 □-N	1500	1MHz,1V	55±30%	0.03

NOTE : □-tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.this indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition of D.C current when at Δt=40°C Whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCD03021T-1R0 □ -N	1	7.96MHz,1V	0.07	2.08
SCD03021T-1R4 □ -N	1.4	7.96MHz,1V	0.09	1.86
SCD03021T-1R8 □ -N	1.8	7.96MHz,1V	0.11	1.8
SCD03021T-2R2 □ -N	2.2	7.96MHz,1V	0.13	1.39
SCD03021T-2R7 □ -N	2.7	7.96MHz,1V	0.14	1.32
SCD03021T-3R3 □ -N	3.3	7.96MHz,1V	0.17	1.25
SCD03021T-3R9 □ -N	3.9	7.96MHz,1V	0.19	1.2
SCD03021T-4R7 □ -N	4.7	7.96MHz,1V	0.21	1.13
SCD03021T-5R6 □ -N	5.6	7.96MHz,1V	0.22	0.91
SCD03021T-6R8 □ -N	6.8	7.96MHz,1V	0.25	0.85
SCD03021T-7R0 □ -N	7	7.96MHz,1V	0.28	0.82
SCD03021T-8R2 □ -N	8.2	7.96MHz,1V	0.28	0.82
SCD03021T-100 □ -N	10	2.52MHz,1V	0.32	0.74
SCD03021T-120 □ -N	12	2.52MHz,1V	0.35	0.64
SCD03021T-150 □ -N	15	2.52MHz,1V	0.4	0.6
SCD03021T-180 □ -N	18	2.52MHz,1V	0.48	0.54
SCD03021T-220 □ -N	22	2.52MHz,1V	0.58	0.5
SCD03021T-270 □ -N	27	2.52MHz,1V	0.65	0.43
SCD03021T-330 □ -N	33	2.52MHz,1V	0.8	0.4
SCD03021T-390 □ -N	39	2.52MHz,1V	0.9	0.37
SCD03021T-470 □ -N	47	2.52MHz,1V	1.19	0.36
SCD03021T-500 □ -N	50	2.52MHz,1V	1.22	0.33
SCD03021T-560 □ -N	56	2.52MHz,1V	1.27	0.31
SCD03021T-680 □ -N	68	2.52MHz,1V	1.73	0.3
SCD03021T-750 □ -N	75	2.52MHz,1V	1.9	0.29
SCD03021T-820 □ -N	82	2.52MHz,1V	1.99	0.28
SCD03021T-101 □ -N	100	1KHz,1V	2.52	0.25
SCD03021T-121 □ -N	120	1KHz,1V	2.9	0.2
SCD03021T-151 □ -N	150	1KHz,1V	3.36	0.19
SCD03021T-181 □ -N	180	1KHz,1V	5.1	0.17
SCD03021T-221 □ -N	220	1KHz,1V	5.8	0.16
SCD03021T-271 □ -N	270	1KHz,1V	7.8	0.14
SCD03021T-301 □ -N	300	1KHz,1V	8.1	0.135
SCD03021T-331 □ -N	330	1KHz,1V	9.24	0.13
SCD03021T-391 □ -N	390	1KHz,1V	10.14	0.12
SCD03021T-461 □ -N	460	1KHz,1V	11.15	0.09
SCD03021T-471 □ -N	470	1KHz,1V	11.48	0.084
SCD03021T-561 □ -N	560	1KHz,1V	19.49	0.08
SCD03021T-681 □ -N	680	1KHz,1V	22	0.08
SCD03021T-821 □ -N	820	1KHz,1V	23.98	0.07
SCD03021T-102 □ -N	1000	1KHz,1V	28.8	0.06

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.this indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition of D.C current when at Δt=40°C Whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCD0403T-1R0 □ -N	1	7.96MHz,1V	0.033	3.8
SCD0403T-1R4 □ -N	1.4	7.96MHz,1V	0.038	3.3
SCD0403T-1R8 □ -N	1.8	7.96MHz,1V	0.042	2.91
SCD0403T-2R2 □ -N	2.2	7.96MHz,1V	0.047	2.6
SCD0403T-2R7 □ -N	2.7	7.96MHz,1V	0.052	2.43
SCD0403T-3R3 □ -N	3.3	7.96MHz,1V	0.058	2.15
SCD0403T-3R9 □ -N	3.9	7.96MHz,1V	0.076	1.98
SCD0403T-4R7 □ -N	4.7	7.96MHz,1V	0.094	1.7
SCD0403T-5R6 □ -N	5.6	7.96MHz,1V	0.101	1.6
SCD0403T-6R8 □ -N	6.8	7.96MHz,1V	0.117	1.41
SCD0403T-8R2 □ -N	8.2	7.96MHz,1V	0.132	1.26
SCD0403T-100 □ -N	10	2.52MHz,1V	0.182	1.15
SCD0403T-120 □ -N	12	2.52MHz,1V	0.21	1.05
SCD0403T-150 □ -N	15	2.52MHz,1V	0.235	0.92
SCD0403T-180 □ -N	18	2.52MHz,1V	0.338	0.84
SCD0403T-220 □ -N	22	2.52MHz,1V	0.378	0.76
SCD0403T-270 □ -N	27	2.52MHz,1V	0.522	0.71
SCD0403T-330 □ -N	33	2.52MHz,1V	0.54	0.64
SCD0403T-390 □ -N	39	2.52MHz,1V	0.587	0.59
SCD0403T-470 □ -N	47	2.52MHz,1V	0.844	0.54
SCD0403T-560 □ -N	56	2.52MHz,1V	0.937	0.5
SCD0403T-680 □ -N	68	2.52MHz,1V	1.117	0.46
SCD0403T-880 □ -N	88	100KHz,1V	1.2	0.3
SCD0403T-101 □ -N	100	1KHz,1V	2	0.4
SCD0403T-121 □ -N	120	1KHz,1V	1.8	0.38

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.this indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition of D.C current when at Δt=40°C Whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCD0501T-1R0 □ -N	1	7.96MHz,1V	0.034	4
SCD0501T-1R4 □ -N	1.4	7.96MHz,1V	0.048	3.6
SCD0501T-1R8 □ -N	1.8	7.96MHz,1V	0.062	3
SCD0501T-2R2 □ -N	2.2	7.96MHz,1V	0.064	2.65
SCD0501T-2R7 □ -N	2.7	7.96MHz,1V	0.078	2.2
SCD0501T-3R3 □ -N	3.3	7.96MHz,1V	0.097	2.11
SCD0501T-3R9 □ -N	3.9	7.96MHz,1V	0.105	2
SCD0501T-4R7 □ -N	4.7	7.96MHz,1V	0.134	1.8
SCD0501T-5R6 □ -N	5.6	7.96MHz,1V	0.17	1.6
SCD0501T-6R8 □ -N	6.8	7.96MHz,1V	0.187	1.5
SCD0501T-8R2 □ -N	8.2	7.96MHz,1V	0.225	1.3
SCD0501T-100 □ -N	10	2.52MHz,1V	0.255	1.1
SCD0501T-120 □ -N	12	2.52MHz,1V	0.292	1.05
SCD0501T-150 □ -N	15	2.52MHz,1V	0.36	1
SCD0501T-180 □ -N	18	2.52MHz,1V	0.43	0.95
SCD0501T-220 □ -N	22	2.52MHz,1V	0.492	0.9
SCD0501T-270 □ -N	27	2.52MHz,1V	0.603	0.77
SCD0501T-330 □ -N	33	2.52MHz,1V	0.796	0.68
SCD0501T-390 □ -N	39	2.52MHz,1V	0.897	0.67
SCD0501T-470 □ -N	47	2.52MHz,1V	1.02	0.66
SCD0501T-500 □ -N	50	2.52MHz,1V	1.04	0.61
SCD0501T-560 □ -N	56	2.52MHz,1V	1.164	0.5
SCD0501T-680 □ -N	68	2.52MHz,1V	1.22	0.47
SCD0501T-750 □ -N	75	2.52MHz,1V	1.34	0.46
SCD0501T-820 □ -N	82	2.52MHz,1V	1.57	0.45
SCD0501T-101 □ -N	100	1KHz,1V	1.8	0.36
SCD0501T-121 □ -N	120	1KHz,1V	2	0.32
SCD0501T-151 □ -N	150	1KHz,1V	2.8	0.27
SCD0501T-181 □ -N	180	1KHz,1V	3.15	0.23
SCD0501T-221 □ -N	220	1KHz,1V	4.4	0.22
SCD0501T-271 □ -N	270	1KHz,1V	6.4	0.19
SCD0501T-301 □ -N	300	1KHz,1V	6.75	0.18
SCD0501T-331 □ -N	330	1KHz,1V	7.2	0.16
SCD0501T-391 □ -N	390	1KHz,1V	8.4	0.15
SCD0501T-461 □ -N	460	1KHz,1V	12	0.14
SCD0501T-471 □ -N	470	1KHz,1V	12.4	0.135
SCD0501T-561 □ -N	560	1KHz,1V	13	0.13
SCD0501T-681 □ -N	680	1KHz,1V	17	0.12
SCD0501T-821 □ -N	820	1KHz,1V	19.5	0.063
SCD0501T-102 □ -N	1000	1KHz,1V	24	0.045

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.this indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition of D.C current when at Δt=40°C Whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCD0502T-1R0 □ -N	1	7.96MHz,1V	0.03	4.5
SCD0502T-1R4 □ -N	1.4	7.96MHz,1V	0.04	4
SCD0502T-1R8 □ -N	1.8	7.96MHz,1V	0.05	3.3
SCD0502T-2R2 □ -N	2.2	7.96MHz,1V	0.06	2.94
SCD0502T-2R7 □ -N	2.7	7.96MHz,1V	0.07	2.5
SCD0502T-3R3 □ -N	3.3	7.96MHz,1V	0.08	2.35
SCD0502T-3R9 □ -N	3.9	7.96MHz,1V	0.09	2.2
SCD0502T-4R7 □ -N	4.7	7.96MHz,1V	0.14	2
SCD0502T-5R6 □ -N	5.6	7.96MHz,1V	0.15	1.8
SCD0502T-6R8 □ -N	6.8	7.96MHz,1V	0.16	1.7
SCD0502T-8R2 □ -N	8.2	7.96MHz,1V	0.17	1.4
SCD0502T-100 □ -N	10	2.52MHz,1V	0.18	1.2
SCD0502T-120 □ -N	12	2.52MHz,1V	0.2	1.18
SCD0502T-150 □ -N	15	2.52MHz,1V	0.22	1.15
SCD0502T-180 □ -N	18	2.52MHz,1V	0.25	1.1
SCD0502T-220 □ -N	22	2.52MHz,1V	0.35	1
SCD0502T-270 □ -N	27	2.52MHz,1V	0.45	0.86
SCD0502T-330 □ -N	33	2.52MHz,1V	0.56	0.76
SCD0502T-390 □ -N	39	2.52MHz,1V	0.69	0.75
SCD0502T-470 □ -N	47	2.52MHz,1V	0.72	0.73
SCD0502T-560 □ -N	56	2.52MHz,1V	0.84	0.55
SCD0502T-680 □ -N	68	2.52MHz,1V	0.9	0.52
SCD0502T-820 □ -N	82	2.52MHz,1V	1.2	0.5
SCD0502T-101 □ -N	100	1KHz,1V	1.3	0.4
SCD0502T-121 □ -N	120	1KHz,1V	1.38	0.36
SCD0502T-151 □ -N	150	1KHz,1V	1.81	0.3
SCD0502T-181 □ -N	180	1KHz,1V	1.95	0.26
SCD0502T-221 □ -N	220	1KHz,1V	3	0.25
SCD0502T-271 □ -N	270	1KHz,1V	3.2	0.21
SCD0502T-331 □ -N	330	1KHz,1V	3.82	0.18
SCD0502T-391 □ -N	390	1KHz,1V	4.68	0.16
SCD0502T-471 □ -N	470	1KHz,1V	5.1	0.15
SCD0502T-561 □ -N	560	1KHz,1V	8.5	0.14
SCD0502T-681 □ -N	680	1KHz,1V	10	0.13
SCD0502T-821 □ -N	820	1KHz,1V	12	0.07
SCD0502T-102 □ -N	1000	1KHz,1V	18	0.05

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.this indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition of D.C current when at Δt=40°C Whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCD0503T-1R0 □ -N	1	7.96MHz,1V	0.03	4.5
SCD0503T-1R2 □ -N	1.2	7.96MHz,1V	0.03	4.2
SCD0503T-1R5 □ -N	1.5	7.96MHz,1V	0.03	4.1
SCD0503T-1R8 □ -N	1.8	7.96MHz,1V	0.03	3.7
SCD0503T-2R0 □ -N	2	7.96MHz,1V	0.03	3.6
SCD0503T-2R2 □ -N	2.2	7.96MHz,1V	0.03	3.5
SCD0503T-2R7 □ -N	2.7	7.96MHz,1V	0.04	3.2
SCD0503T-3R3 □ -N	3.3	7.96MHz,1V	0.05	2.8
SCD0503T-3R9 □ -N	3.9	7.96MHz,1V	0.06	2.6
SCD0503T-4R7 □ -N	4.7	7.96MHz,1V	0.07	2.5
SCD0503T-5R6 □ -N	5.6	7.96MHz,1V	0.08	2.4
SCD0503T-6R8 □ -N	6.8	7.96MHz,1V	0.09	2.2
SCD0503T-8R2 □ -N	8.2	7.96MHz,1V	0.1	2
SCD0503T-100 □ -N	10	2.52MHz,1V	0.12	1.8
SCD0503T-120 □ -N	12	2.52MHz,1V	0.13	1.75
SCD0503T-150 □ -N	15	2.52MHz,1V	0.15	1.7
SCD0503T-180 □ -N	18	2.52MHz,1V	0.18	1.6
SCD0503T-220 □ -N	22	2.52MHz,1V	0.22	1.5
SCD0503T-270 □ -N	27	2.52MHz,1V	0.26	1.4
SCD0503T-330 □ -N	33	2.52MHz,1V	0.33	1.1
SCD0503T-390 □ -N	39	2.52MHz,1V	0.42	1
SCD0503T-470 □ -N	47	2.52MHz,1V	0.5	0.9
SCD0503T-560 □ -N	56	2.52MHz,1V	0.55	0.85
SCD0503T-680 □ -N	68	2.52MHz,1V	0.65	0.8
SCD0503T-820 □ -N	82	2.52MHz,1V	0.8	0.65
SCD0503T-101 □ -N	100	1KHz,1V	0.9	0.6
SCD0503T-121 □ -N	120	1KHz,1V	1	0.58
SCD0503T-151 □ -N	150	1KHz,1V	1.3	0.43
SCD0503T-181 □ -N	180	1KHz,1V	1.5	0.41
SCD0503T-221 □ -N	220	1KHz,1V	2	0.38
SCD0503T-271 □ -N	270	1KHz,1V	2.5	0.35
SCD0503T-331 □ -N	330	1KHz,1V	3.2	0.28
SCD0503T-391 □ -N	390	1KHz,1V	3.5	0.26
SCD0503T-471 □ -N	470	1KHz,1V	4.2	0.2
SCD0503T-561 □ -N	560	1KHz,1V	4.5	0.19
SCD0503T-681 □ -N	680	1KHz,1V	6.5	0.18
SCD0503T-821 □ -N	820	1KHz,1V	7.5	0.15
SCD0503T-102 □ -N	1000	1KHz,1V	8	0.13

NOTE : □-tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.this indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition of D.C current when at Δt=40°C Whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCD0504T-3R3 □ -N	3.3	7.96MHz,1V	0.0314	2.59
SCD0504T-100 □ -N	10	2.52MHz,1V	0.1	1.44
SCD0504T-120 □ -N	12	2.52MHz,1V	0.12	1.4
SCD0504T-150 □ -N	15	2.52MHz,1V	0.14	1.3
SCD0504T-180 □ -N	18	2.52MHz,1V	0.15	1.23
SCD0504T-220 □ -N	22	2.52MHz,1V	0.18	1.11
SCD0504T-270 □ -N	27	2.52MHz,1V	0.2	0.97
SCD0504T-330 □ -N	33	2.52MHz,1V	0.23	0.88
SCD0504T-390 □ -N	39	2.52MHz,1V	0.32	0.8
SCD0504T-470 □ -N	47	2.52MHz,1V	0.37	0.72
SCD0504T-560 □ -N	56	2.52MHz,1V	0.42	0.68
SCD0504T-680 □ -N	68	2.52MHz,1V	0.46	0.61
SCD0504T-820 □ -N	82	2.52MHz,1V	0.6	0.58
SCD0504T-101 □ -N	100	1KHz,1V	0.7	0.52
SCD0504T-121 □ -N	120	1KHz,1V	0.93	0.48
SCD0504T-151 □ -N	150	1KHz,1V	1.1	0.4
SCD0504T-181 □ -N	180	1KHz,1V	1.38	0.38
SCD0504T-221 □ -N	220	1KHz,1V	1.57	0.35
SCD0504T-102 □ -N	1000	1KHz,1V	10	0.03

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.this indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition of D.C current when at Δt=40°C Whichever is lower.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCD0703T-100 □ -N	10	2.52MHz,1V	0.08	1.44
SCD0703T-120 □ -N	12	2.52MHz,1V	0.09	1.39
SCD0703T-150 □ -N	15	2.52MHz,1V	0.1	1.24
SCD0703T-180 □ -N	18	2.52MHz,1V	0.11	1.12
SCD0703T-220 □ -N	22	2.52MHz,1V	0.13	1.07
SCD0703T-270 □ -N	27	2.52MHz,1V	0.15	0.94
SCD0703T-330 □ -N	33	2.52MHz,1V	0.17	0.85
SCD0703T-390 □ -N	39	2.52MHz,1V	0.22	0.74
SCD0703T-470 □ -N	47	2.52MHz,1V	0.25	0.68
SCD0703T-560 □ -N	56	2.52MHz,1V	0.28	0.64
SCD0703T-680 □ -N	68	2.52MHz,1V	0.33	0.59
SCD0703T-820 □ -N	82	2.52MHz,1V	0.41	0.54
SCD0703T-101 □ -N	100	1KHz,1V	0.48	0.51
SCD0703T-121 □ -N	120	1KHz,1V	0.54	0.49
SCD0703T-151 □ -N	150	1KHz,1V	0.75	0.4
SCD0703T-181 □ -N	180	1KHz,1V	1.02	0.36
SCD0703T-221 □ -N	220	1KHz,1V	1.2	0.31
SCD0703T-271 □ -N	270	1KHz,1V	1.31	0.29
SCD0703T-331 □ -N	330	1KHz,1V	1.5	0.28

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.this indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition of D.C current when at Δt=40°C Whichever is lower.

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCD0705T-1R0 □ -N	1	2.52MHz,1V	0.02	3.7
SCD0705T-1R4 □ -N	1.4	7.96MHz,1V	0.02	3.7
SCD0705T-1R8 □ -N	1.8	7.96MHz,1V	0.02	3.7
SCD0705T-2R2 □ -N	2.2	7.96MHz,1V	0.02	3.7
SCD0705T-2R7 □ -N	2.7	7.96MHz,1V	0.02	3.7
SCD0705T-3R3 □ -N	3.3	7.96MHz,1V	0.03	3.7
SCD0705T-3R9 □ -N	3.9	7.96MHz,1V	0.03	3.7
SCD0705T-4R7 □ -N	4.7	7.96MHz,1V	0.04	3.5
SCD0705T-5R6 □ -N	5.6	7.96MHz,1V	0.04	3.3
SCD0705T-6R8 □ -N	6.8	7.96MHz,1V	0.04	3.1
SCD0705T-8R2 □ -N	8.2	7.96MHz,1V	0.05	2.7
SCD0705T-100 □ -N	10	2.52MHz,1V	0.07	2.3
SCD0705T-120 □ -N	12	2.52MHz,1V	0.08	2
SCD0705T-150 □ -N	15	2.52MHz,1V	0.09	1.8
SCD0705T-180 □ -N	18	2.52MHz,1V	0.1	1.6
SCD0705T-220 □ -N	22	2.52MHz,1V	0.11	1.5
SCD0705T-270 □ -N	27	2.52MHz,1V	0.12	1.3
SCD0705T-330 □ -N	33	2.52MHz,1V	0.13	1.2
SCD0705T-390 □ -N	39	2.52MHz,1V	0.16	1.1
SCD0705T-470 □ -N	47	2.52MHz,1V	0.18	1.1
SCD0705T-560 □ -N	56	2.52MHz,1V	0.24	0.94
SCD0705T-680 □ -N	68	2.52MHz,1V	0.28	0.85
SCD0705T-820 □ -N	82	2.52MHz,1V	0.37	0.78
SCD0705T-101 □ -N	100	1KHz,1V	0.43	0.72
SCD0705T-121 □ -N	120	1KHz,1V	0.47	0.66
SCD0705T-151 □ -N	150	1KHz,1V	0.64	0.58
SCD0705T-181 □ -N	180	1KHz,1V	0.71	0.51
SCD0705T-221 □ -N	220	1KHz,1V	0.96	0.49
SCD0705T-271 □ -N	270	1KHz,1V	1.11	0.42
SCD0705T-331 □ -N	330	1KHz,1V	1.26	0.4
SCD0705T-391 □ -N	390	1KHz,1V	1.77	0.36
SCD0705T-471 □ -N	470	1KHz,1V	1.96	0.34

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.this indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition of D.C current when at Δt=40°C Whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCD1004T-100 □ -N	10	2.52MHz,1V	0.05	2.38
SCD1004T-120 □ -N	12	2.52MHz,1V	0.06	2.13
SCD1004T-150 □ -N	15	2.52MHz,1V	0.07	1.87
SCD1004T-180 □ -N	18	2.52MHz,1V	0.08	1.73
SCD1004T-220 □ -N	22	2.52MHz,1V	0.09	1.6
SCD1004T-270 □ -N	27	2.52MHz,1V	0.1	1.44
SCD1004T-330 □ -N	33	2.52MHz,1V	0.12	1.26
SCD1004T-390 □ -N	39	2.52MHz,1V	0.15	1.2
SCD1004T-470 □ -N	47	2.52MHz,1V	0.17	1.1
SCD1004T-560 □ -N	56	2.52MHz,1V	0.2	1.01
SCD1004T-680 □ -N	68	2.52MHz,1V	0.22	0.91
SCD1004T-820 □ -N	82	2.52MHz,1V	0.25	0.85
SCD1004T-101 □ -N	100	1KHz,1V	0.34	0.74
SCD1004T-121 □ -N	120	1KHz,1V	0.4	0.69
SCD1004T-151 □ -N	150	1KHz,1V	0.54	0.61
SCD1004T-181 □ -N	180	1KHz,1V	0.62	0.56
SCD1004T-221 □ -N	220	1KHz,1V	0.72	0.53
SCD1004T-271 □ -N	270	1KHz,1V	0.95	0.45
SCD1004T-331 □ -N	330	1KHz,1V	1.1	0.42
SCD1004T-391 □ -N	390	1KHz,1V	1.24	0.38
SCD1004T-471 □ -N	470	1KHz,1V	1.53	0.35
SCD1004T-561 □ -N	560	1KHz,1V	1.9	0.32

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.this indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition of D.C current when at Δt=40°C Whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCD1005T-4R7 □-N	4.7	7.96MHz,1V	0.037	2.6
SCD1005T-6R8 □-N	6.8	7.96MHz,1V	0.037	4.33
SCD1005T-100 □-N	10	2.52MHz,1V	0.06	2.6
SCD1005T-120 □-N	12	2.52MHz,1V	0.07	2.45
SCD1005T-150 □-N	15	2.52MHz,1V	0.08	2.27
SCD1005T-180 □-N	18	2.52MHz,1V	0.09	2.15
SCD1005T-220 □-N	22	2.52MHz,1V	0.1	1.95
SCD1005T-270 □-N	27	2.52MHz,1V	0.11	1.76
SCD1005T-330 □-N	33	2.52MHz,1V	0.12	1.5
SCD1005T-390 □-N	39	2.52MHz,1V	0.14	1.37
SCD1005T-470 □-N	47	2.52MHz,1V	0.17	1.28
SCD1005T-560 □-N	56	2.52MHz,1V	0.19	1.17
SCD1005T-680 □-N	68	2.52MHz,1V	0.22	1.11
SCD1005T-820 □-N	82	2.52MHz,1V	0.25	1
SCD1005T-101 □-N	100	1KHz,1V	0.35	0.97
SCD1005T-121 □-N	120	1KHz,1V	0.4	0.89
SCD1005T-151 □-N	150	1KHz,1V	0.47	0.78
SCD1005T-181 □-N	180	1KHz,1V	0.63	0.72
SCD1005T-221 □-N	220	1KHz,1V	0.73	0.66
SCD1005T-271 □-N	270	1KHz,1V	0.97	0.57
SCD1005T-331 □-N	330	1KHz,1V	1.15	0.52
SCD1005T-391 □-N	390	1KHz,1V	1.3	0.48
SCD1005T-471 □-N	470	1KHz,1V	1.48	0.42
SCD1005T-561 □-N	560	1KHz,1V	1.9	0.33
SCD1005T-681 □-N	680	1KHz,1V	2.25	0.28
SCD1005T-821 □-N	820	1KHz,1V	2.55	0.24

NOTE : □-tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

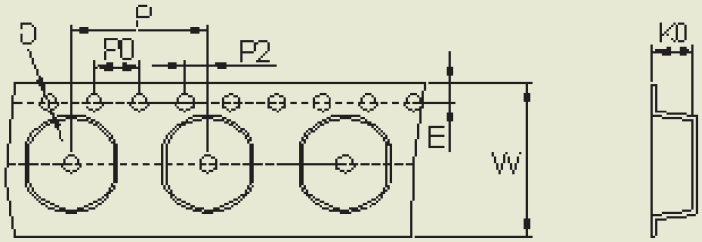
1.Operating temperature range -40°C~85°C

2.this indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition of D.C current when at Δt=40°C Whichever is lower.

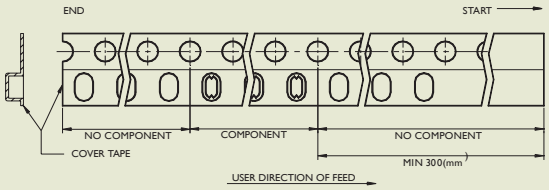
"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

SMD UNSHIELDED POWER INDUCTORS - SCD SERIES

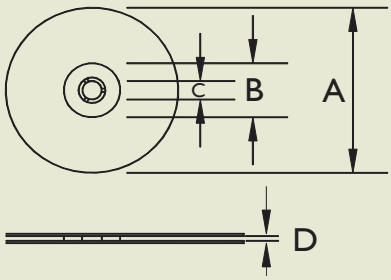
Packaging Specifications



Tape Material



Reel Dimemsions



Dimensions : mm

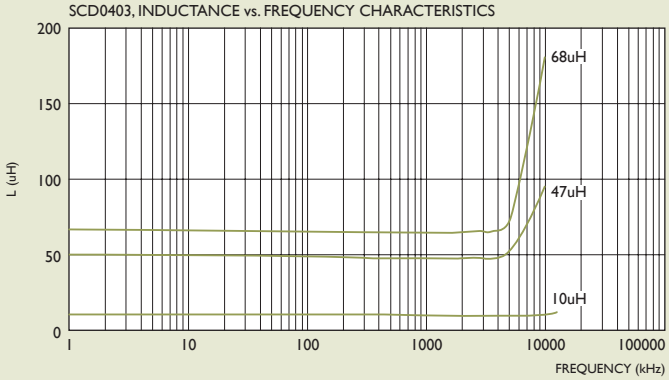
TYPE	TAPE DIMENSIONS							RECOMMENDED PATTERN		REEL DIMENSIONS				QUANTITY PCS/REEL
	K0	D	E	W	P	P0	P2	A	B	A	B	C	D	
SCD0301	1.2	1.50	1.75	12	8	4	2			330	100	13	13.4	5000
SCD03015	1.80	1.55	1.75	12	8	4	2	4.5	1.0	330	100	13	13.4	3000
SCD03021	2.50	1.55	1.75	12	8	4	2	4.5	1.0	330	100	13	13.4	3000
SCD0403	3.1	1.55	1.75	12	8	4	2	5.5	1.2	330	100	13	13.4	2000
SCD0501	2.35	1.55	1.75	12	8	4	2	6.8	2.0	330	100	13	13.4	2000
SCD0502	3.00	1.55	1.75	12	8	4	2	6.8	2.0	330	100	13	13.4	2000
SCD0503	3.30	1.55	1.75	12	8	4	2	6.8	2.0	330	100	13	13.4	2000
SCD0504	4.8	1.55	1.75	16	8	4	2	6.8	1.3	330	100	13	17.4	1500
SCD0703	3.8	1.55	1.75	16	12	4	2	8.8	2.1	330	100	13	17.4	1000
SCD0705	5.2	1.55	1.75	16	12	4	2	8.8	2.1	330	100	13	17.4	700
SCD1004	5.8	1.55	1.75	24	12	4	2	11	2.1	330	100	13	24.4	700
SCD1005	5.8	1.55	1.75	24	12	4	2	11	2.1	330	100	13	24.4	700
SCDR105B	5.8	1.55	1.75	24	12	4	2	10	2.5	330	100	13	24.4	750

TYPICAL ELECTRICAL CHARACTERISTICS

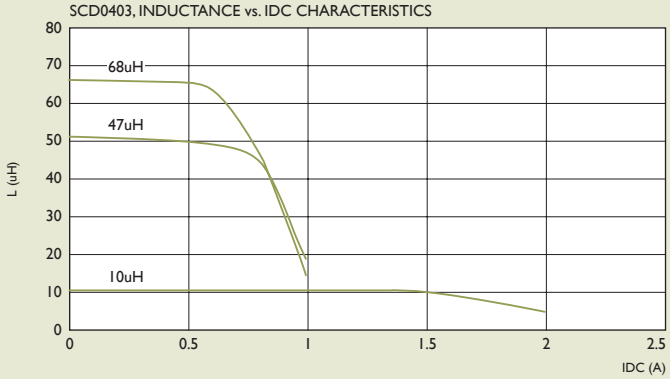
Curves of SCD Series

Test Instruments : HP4291A Impedance / Material Analyzer

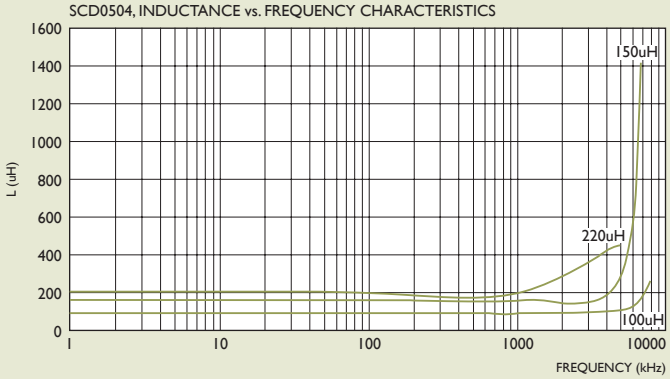
SCD0403, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



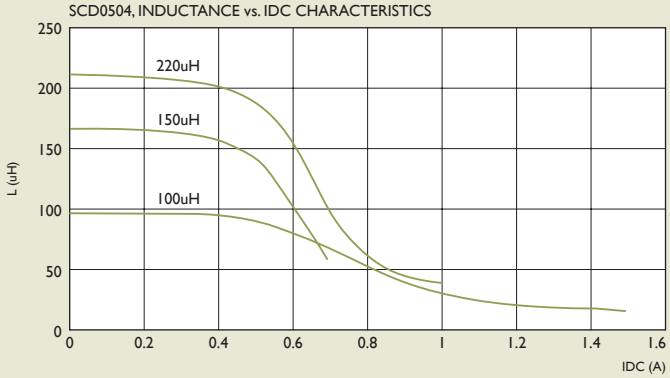
SCD0403, INDUCTANCE vs. IDC CHARACTERISTICS



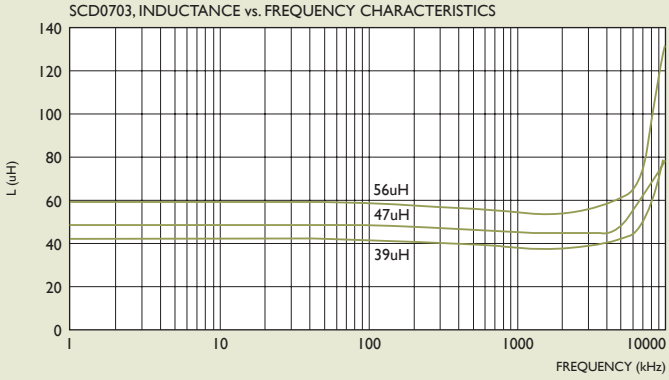
SCD0504, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



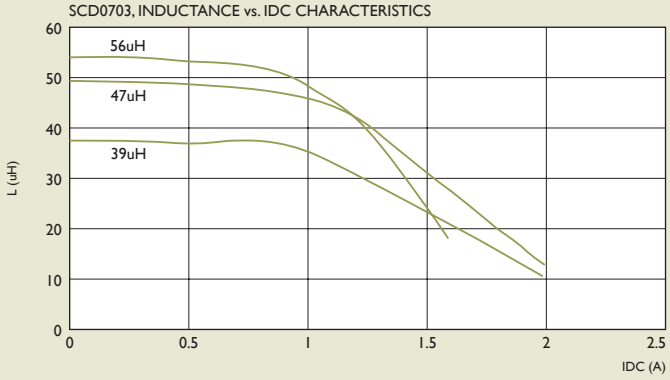
SCD0504, INDUCTANCE vs. IDC CHARACTERISTICS



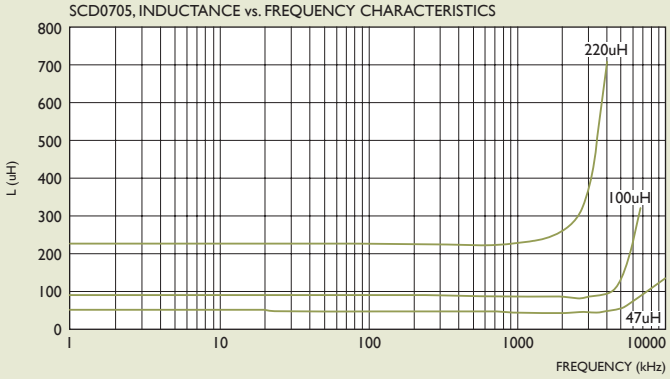
SCD0703, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



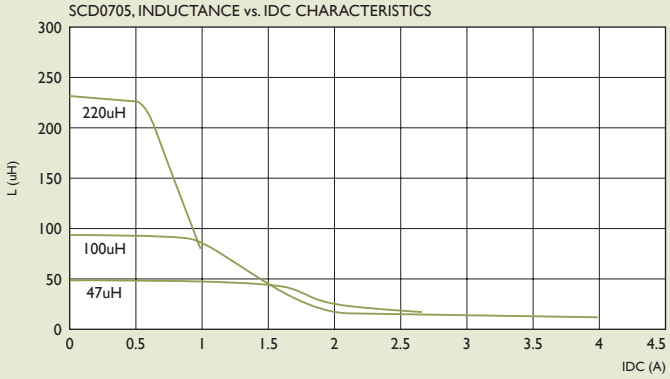
SCD0703, INDUCTANCE vs. IDC CHARACTERISTICS



SCD0705, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



SCD0705, INDUCTANCE vs. IDC CHARACTERISTICS

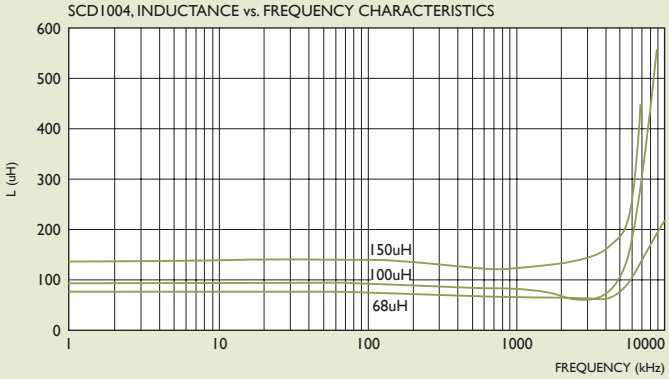


TYPICAL ELECTRICAL CHARACTERISTICS

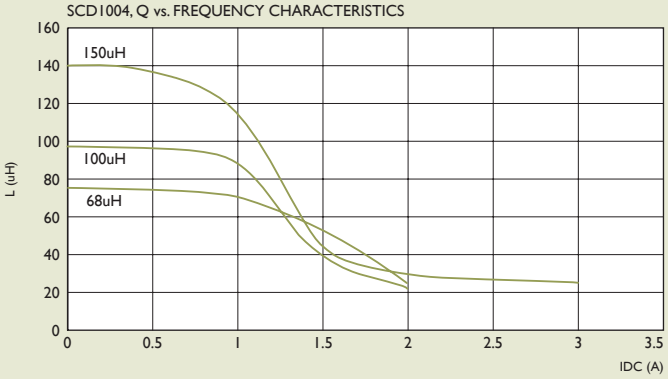
Curves of SCD Series

Test Instruments : HP4291A Impedance / Material Analyzer

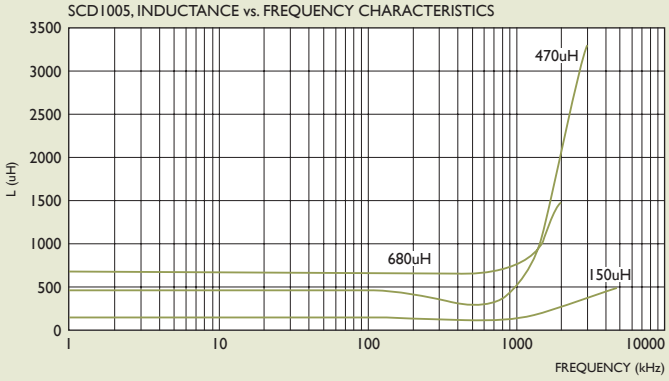
SCD1004, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



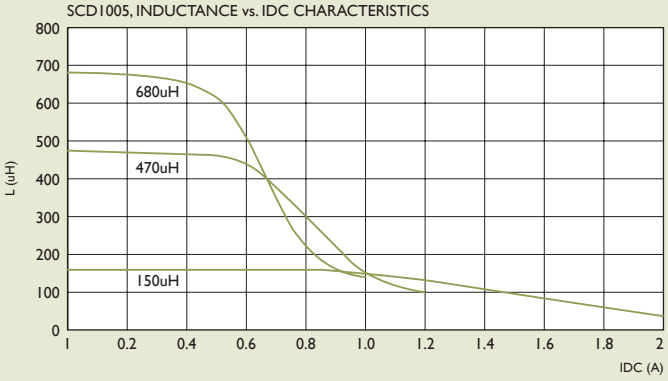
SCD1004, Q vs. FREQUENCY CHARACTERISTICS



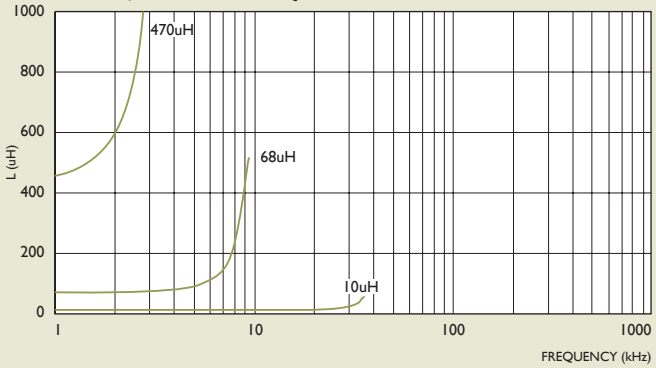
SCD1005, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



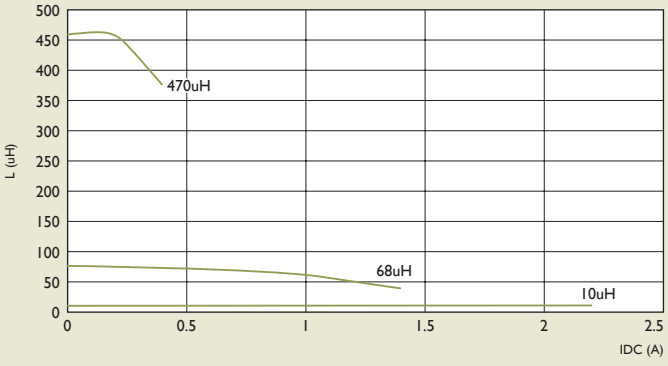
SCD1005, INDUCTANCE vs. IDC CHARACTERISTICS



SCDR105B, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



SCDR105B, INDUCTANCE vs. IDC CHARACTERISTICS



SCD SERIES RELIABILITY TEST

1-1 MECHANICAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-1-1	Vibration	Appearance : No Damage L Change : within ±10% Q Change : within ±30% RDC : within Specification	Test device shall be soldered on the substrate. Oscillation Frequency : 10 to 55 to 10Hz for 1Min. Amplitude : 1.5mm Time : 2Hrs. for each Axis (X,Y & Z), Total 6Hrs.
1-1-2	Resistance to Soldering Heat	Appearance : No Damage	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 260 ± 5°C Immersion Time : 10 ± 1Sec.
1-1-3	Solderability	The electrodes shall be at least 90% covered with new solder coating.	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 230 ± 5°C Immersion Time : 4 ± 1Sec.

1-2 ENVIRONMENTAL PERFORMANCE

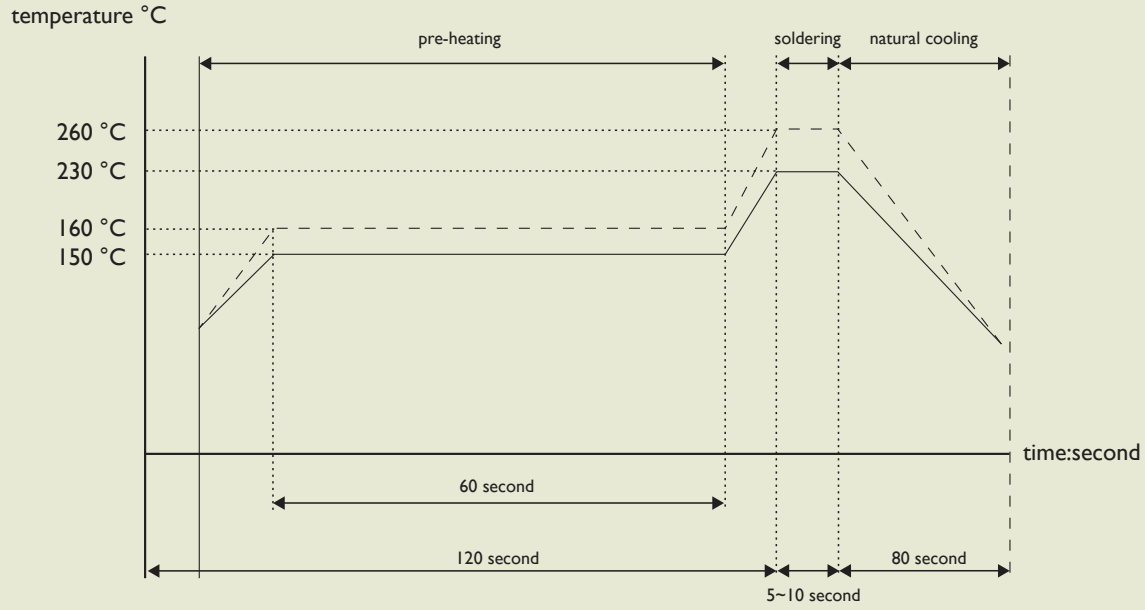
NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-2-1	Temperature Shock	Appearance : No Damage L Change : within ±10% L Change : within ±30% RDC : within Specification	10 Cycles (Air to Air) 1 Cycles shall Consist of : 30Min. Exposure to -55°C 30Min. Exposure to -125°C 15Sec. Max. Transition between Temperatures Measured after Exposure in the Room Condition for 24Hrs.
1-2-2	Temperature Cycle		One Cycle

Step	Temperature (°C)	Time (Min.)
1	-25 ± 3	30
2	25 ± 2	3
3	85 ± 3	30
4	25 ± 2	3

	Total : 100 Cycles Measured after Exposure in the Room Condition for 24Hrs.
1-2-3 Humidity Resistance	Temperature : 40 ± 2°C Relative Humidity : 90 ~ 95% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-4 High Temperature Resistance	Temperature : 85 ± 3°C Relative Humidity : 20% Applied Current : Rated Current Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-5 Low Temperature Resistance	Temperature : -25 ± 3°C Relative Humidity : 0% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



for: lead solder ——————

for: lead-free solder .....

SMT Power Inductors

SCDS Series

PRODUCT IDENTIFICATION

SCDS □□□ □ - □□□ □ -□

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

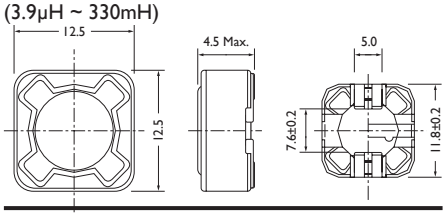
- T : Packing : Tape and Reel
- HP : Low DCR
- LD : High Power
- Tolerance : K=±10% ; M=±20% ; T=±30%
- Internal No.: B: Silver plated terminals (3D12~6D38); S: Base type terminals (2D11~2D18HP & 62T&127)
- Note : YAGEO will start to release lead-free terminals that meet SONY SS-00259's criterial and YAGEO Internal No will changed to "N" as identification. EX : SCDS 127T-100M-N

FEATURES

- Available in magnetically shielded.
- Low DC resistance.
- Suitable for large currents.
- Ideal for a variety of DC - DC converter inductor applications.
- Available on tape and reel for auto surface mounting.

SCDS124

(3.9μH ~ 330mH)

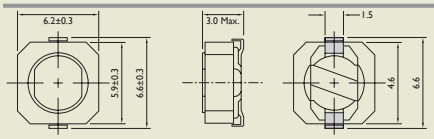
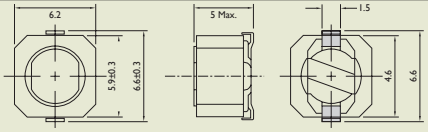
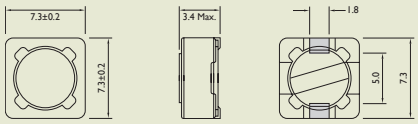
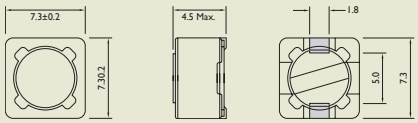
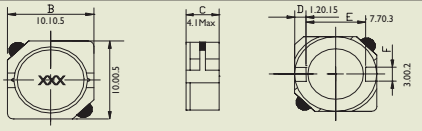
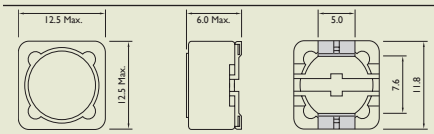
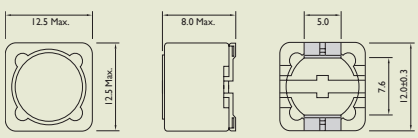


APPLICATIONS

- Power supply for VTRs.
- OA equipment.
- LCD televisions.
- Notebook PCs.
- Portable communication equipment.
- DC / DC converters, etc.

CONFIGURATION AND DIMENSIONS

Dimensions : mm

TYPE	SHAPES AND DIMENSION
SCDS62T (3.3μH ~ 330μH)	
SCDS64T (10μH ~ 1000μH)	
SCDS73 (10μH ~ 1.0mH)	
SCDS74 (10μH ~ 1.0mH)	
SCDS104R (1.5μH ~ 330μH)	
SCDS125 (10μH ~ 1.0mH)	
SCDS127 (10μH ~ 47mH)	

STANDARD SPECIFICATIONS

PART	INDUCTANCE (H)	D.C.R.(M)MAX. SCDS 62T	SCDS 64T	SCDS 73	SCDS 74	SCDS 104R	SCDS 124	SCDS 125	SCDS 127	RATEDCURRENT(A)MAX. SCDS 62	SCDS 64	SCDS 73	SCDS 74	SCDS 104R	SCDS 124	SCDS 125	SCDS 127
1R0	1.0																
1R2	1.2								7.0								9.80
1R5	1.5					8.1								10.0			
1R8	1.8																
2R2	2.2									1.94							
2R4	2.4								11.5								8.00
2R5	2.5					10.5								7.5			
2R7	2.7																
3R0	3.0																
3R3	3.3	68															
3R5	3.5								13.5								7.50
3R8	3.8					13								6.0			
3R9	3.9						15								6.50		
4R1	4.1																
4R2	4.2																
4R7	4.7	80					18		15.8	1.63					5.70		6.80
5R0	5.0																
5R2	5.2					22								5.5			
5R3	5.3																
5R4	5.4																
5R5	5.5	96								1.40							
5R6	5.6																
6R0	6.0																
6R1	6.1								17.6								6.60
6R2	6.2																
6R8	6.8	100					23			1.33					4.90		
7R0	7.0					27								4.8			
7R3	7.3																
7R4	7.4																
7R6	7.6								20.0								5.90
8R2	8.2	100								1.14							
8R6	8.6																
8R7	8.7																
8R9	8.9																
100	10	150	120	72	49	35	28	25	21.6	1.10	1.35	1.68	1.84	4.4	4.50	4.00	5.40
120	12	200	130	98	58		38	27	24.3	1.00	1.22	1.52	1.71		4.00	3.50	4.90
150	15	230	180	130	81	50	50	30	27.0	0.90	1.11	1.33	1.47	3.6	3.20	3.30	4.50
180	18	270	240	140	91		57	34	39.2	0.80	1.02	1.20	1.31		3.10	3.00	3.90
220	22	340	270	190	110	73	66	36	43.2	0.74	0.91	1.07	1.23	2.9	2.90	2.80	3.60
270	27	380	300	210	150		80	51	45.9	0.66	0.82	0.96	1.12		2.80	2.30	3.40
330	33	450	330	240	170	93	97	57	64.8	0.59	0.74	0.91	0.96	2.3	2.70	2.10	3.00
390	39	490	370	320	230		132	68	72.9	0.54	0.69	0.77	0.91		2.10	2.00	2.75
470	47	690	520	360	260	128	150	75	100	0.50	0.62	0.76	0.88	2.1	1.90	1.80	2.50
560	56	780	560	470	350		190	110	110	0.46	0.58	0.68	0.75		1.80	1.70	2.35
680	68	1070	630	520	380	213	220	120	140	0.42	0.51	0.61	0.69	1.5	1.50	1.50	2.10
820	82	1210	710	690	430		260	140	160	0.38	0.46	0.57	0.61		1.30	1.40	1.95
101	100	1390	1030	790	610	304	308	160	220	0.34	0.42	0.50	0.60	1.35	1.20	1.30	1.70
121	120	1900	1150	890	660		380	170	250	0.31	0.38	0.49	0.52		1.10	1.10	1.60
151	150	2180	1680	1270	880	506	530	230	280	0.28	0.35	0.43	0.46	1.15	0.95	1.00	1.42
181	180	2770	1870	1450	980		620	290	350	0.26	0.32	0.39	0.42		0.85	0.90	1.30
221	220	3120	2080	1650	1170	756	700	400	390	0.23	0.29	0.35	0.36	0.92	0.80	0.80	1.16
271	270	4380	2370	2310	1640		876	460	560	0.22	0.26	0.32	0.34		0.60	0.75	1.06
331	330	4940	2670	2620	1860	1.09	990	510	640	0.19	0.23	0.28	0.32	0.70	0.50	0.68	0.95
391	390		2940	2940	2850			690	700		0.22	0.26	0.29			0.65	0.88
471	470		3930	4180	3010			770	980		0.20	0.24	0.26			0.58	0.79
561	560		5430	4670	3620			860	1070		0.18	0.22	0.23			0.54	0.73
681	680		7320	5730	4630			1200	1460		0.17	0.19	0.22			0.48	0.67
821	820		8240	6540	5200			1340	1640		0.15	0.18	0.20			0.43	0.60
102	1000		9260	9440	6000			1530	1820		0.14	0.16	0.18			0.40	0.55

• Test Freq.(L): SCDS62: 3.3 ~ 8.2H(7.96MHz/1V), 10~82H(2.52MHz/1V), 100 ~ 330H(1KHz/1V)
SCDS64/73/74/125/127: (1KHz/1V)

• Other type — Rated current :The rate current indicastes the current when the inductance decreases to 65%. Over of it's nominal value or D.C.current when the temperature rising Dt =40°C lower, whichever is lower.

• Test Instrument :L : HP4192A LF IMPEDANCE ANALYZER
RDC : CHEN HWA 502BC
Rated current: HP4284+42841A or Ch1061+CH301A

Tolerance Of Inductors
- SCDS62 3.3~330H 20%(M)
- SCDS64 10~1000H 20%(M)
- SCDS73 10~1000H 20%(M)
- SCDS74 10~1000H 20%(M)
- SCDS104R 1.5~330H 30%(T)
- SCDS124 3.9~330H 20%(M)
- SCDS125 1.0~1000H 20%(M)
- SCDS127 1.2~7.6H+40-20%(N)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCDS62T-3R3 □-N	3.3	7.96MHz,1V	0.068+0	1.94
SCDS62T-3R6 □-N	3.6	7.96MHz,1V	0.08+0	1.63
SCDS62T-4R7 □-N	4.7	7.96MHz,1V	0.08+0	1.63
SCDS62T-5R6 □-N	5.6	7.96MHz,1V	0.96+0	1.4
SCDS62T-6R8 □-N	6.8	7.96MHz,1V	0.1+0	1.33
SCDS62T-8R2 □-N	8.2	7.96MHz,1V	0.1+0	1.14
SCDS62T-100 □-N	10	2.52MHz,1V	0.15+0	1.1
SCDS62T-120 □-N	12	2.52MHz,1V	0.2+0	1
SCDS62T-150 □-N	15	2.52MHz,1V	0.23+0	0.9
SCDS62T-180 □-N	18	2.52MHz,1V	0.27+0	0.8
SCDS62T-220 □-N	22	2.52MHz,1V	0.34+0	0.74
SCDS62T-270 □-N	27	2.52MHz,1V	0.38+0	0.66
SCDS62T-330 □-N	33	2.52MHz,1V	0.45+0	0.59
SCDS62T-390 □-N	39	2.52MHz,1V	0.49+0	0.54
SCDS62T-470 □-N	47	2.52MHz,1V	0.69+0	0.5
SCDS62T-560 □-N	56	2.52MHz,1V	0.78+0	0.46
SCDS62T-680 □-N	68	2.52MHz,1V	1.07+0	0.42
SCDS62T-820 □-N	82	2.52MHz,1V	1.21+0	0.38
SCDS62T-101 □-N	100	1KHz,1V	1.39+0	0.34
SCDS62T-121 □-N	120	1KHz,1V	1.9+0	0.31
SCDS62T-151 □-N	150	1KHz,1V	2.18+0	0.28
SCDS62T-181 □-N	180	1KHz,1V	2.77+0	0.26
SCDS62T-221 □-N	220	1KHz,1V	3.12+0	0.23
SCDS62T-271 □-N	270	1KHz,1V	4.38+0	0.22
SCDS62T-331 □-N	330	1KHz,1V	4.94+0	0.19

NOTE : □-tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.Inductance drop = 10% typ. at IDC

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCDS64T-100 □ -N	10	1KHz,1V	0.12+0	1.35
SCDS64T-120 □ -N	12	1KHz,1V	0.13+0	1.22
SCDS64T-150 □ -N	15	1KHz,1V	0.18+0	1.11
SCDS64T-180 □ -N	18	1KHz,1V	0.24+0	1.02
SCDS64T-220 □ -N	22	1KHz,1V	0.27+0	0.91
SCDS64T-270 □ -N	27	1KHz,1V	0.3+0	0.82
SCDS64T-330 □ -N	33	1KHz,1V	0.33+0	0.74
SCDS64T-390 □ -N	39	1KHz,1V	0.37+0	0.69
SCDS64T-470 □ -N	47	1KHz,1V	0.52+0	0.62
SCDS64T-560 □ -N	56	1KHz,1V	0.56+0	0.58
SCDS64T-680 □ -N	68	1KHz,1V	0.63+0	0.51
SCDS64T-820 □ -N	82	1KHz,1V	0.71+0	0.46
SCDS64T-101 □ -N	100	1KHz,1V	1.03+0	0.42
SCDS64T-121 □ -N	120	1KHz,1V	1.15+0	0.38
SCDS64T-151 □ -N	150	1KHz,1V	1.68+0	0.35
SCDS64T-181 □ -N	180	1KHz,1V	1.87+0	0.32
SCDS64T-221 □ -N	220	1KHz,1V	2.08+0	0.29
SCDS64T-271 □ -N	270	1KHz,1V	2.37+0	0.26
SCDS64T-331 □ -N	330	1KHz,1V	2.67+0	0.23
SCDS64T-391 □ -N	390	1KHz,1V	2.94+0	0.22
SCDS64T-471 □ -N	470	1KHz,1V	3.93+0	0.2
SCDS64T-561 □ -N	560	1KHz,1V	5.43+0	0.18
SCDS64T-681 □ -N	680	1KHz,1V	7.32+0	0.17
SCDS64T-821 □-N	820	1KHz,1V	8.24+0	0.15
SCDS64T-102 □ -N	1000	1KHz,1V	9.26+0	0.14

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.Inductance drop = 10% typ. at IDC

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCDS73T-100 □ -N	10	1KHz,1V	0.072+0	1.68
SCDS73T-120 □ -N	12	1KHz,1V	0.098+0	1.52
SCDS73T-150 □ -N	15	1KHz,1V	0.13+0	1.33
SCDS73T-180 □ -N	18	1KHz,1V	0.14+0	1.2
SCDS73T-220 □ -N	22	1KHz,1V	0.19+0	1.07
SCDS73T-270 □ -N	27	1KHz,1V	0.21+0	0.96
SCDS73T-330 □ -N	33	1KHz,1V	0.24+0	0.91
SCDS73T-390 □ -N	39	1KHz,1V	0.32+0	0.77
SCDS73T-470 □ -N	47	1KHz,1V	0.36+0	0.76
SCDS73T-560 □ -N	56	1KHz,1V	0.47+0	0.68
SCDS73T-680 □ -N	68	1KHz,1V	0.52+0	0.61
SCDS73T-820 □ -N	82	1KHz,1V	0.69+0	0.57
SCDS73T-101 □ -N	100	1KHz,1V	0.79+0	0.5
SCDS73T-121 □ -N	120	1KHz,1V	0.89+0	0.49
SCDS73T-151 □ -N	150	1KHz,1V	1.27+0	0.43
SCDS73T-181 □ -N	180	1KHz,1V	1.45+0	0.39
SCDS73T-221 □ -N	220	1KHz,1V	1.65+0	0.35
SCDS73T-271 □ -N	270	1KHz,1V	2.31+0	0.32
SCDS73T-331 □ -N	330	1KHz,1V	2.62+0	0.28
SCDS73T-391 □ -N	390	1KHz,1V	2.94+0	0.26
SCDS73T-471 □ -N	470	1KHz,1V	4.18+0	0.24
SCDS73T-561 □ -N	560	1KHz,1V	4.67+0	0.22
SCDS73T-681 □ -N	680	1KHz,1V	5.73+0	0.19
SCDS73T-821 □ -N	820	1KHz,1V	6.54+0	0.18
SCDS73T-102 □ -N	1000	1KHz,1V	9.44+0	0.16

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.Inductance drop = 10% typ. at IDC

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCDS74T-100 □ -N	10	1KHz,1V	0.049+0	1.84
SCDS74T-120 □ -N	12	1KHz,1V	0.058+0	1.71
SCDS74T-150 □ -N	15	1KHz,1V	0.081+0	1.47
SCDS74T-180 □ -N	18	1KHz,1V	0.091+0	1.31
SCDS74T-220 □ -N	22	1KHz,1V	0.11+0	1.23
SCDS74T-270 □ -N	27	1KHz,1V	0.15+0	1.12
SCDS74T-330 □ -N	33	1KHz,1V	0.17+0	0.96
SCDS74T-390 □ -N	39	1KHz,1V	0.23+0	0.91
SCDS74T-470 □ -N	47	1KHz,1V	0.26+0	0.88
SCDS74T-560 □ -N	56	1KHz,1V	0.35+0	0.75
SCDS74T-680 □ -N	68	1KHz,1V	0.38+0	0.69
SCDS74T-820 □ -N	82	1KHz,1V	0.43+0	0.61
SCDS74T-101 □ -N	100	1KHz,1V	0.61+0	0.6
SCDS74T-121 □ -N	120	1KHz,1V	0.66+0	0.52
SCDS74T-151 □ -N	150	1KHz,1V	0.88+0	0.46
SCDS74T-181 □ -N	180	1KHz,1V	0.98+0	0.42
SCDS74T-221 □ -N	220	1KHz,1V	1.17+0	0.36
SCDS74T-271 □ -N	270	1KHz,1V	1.64+0	0.34
SCDS74T-331 □ -N	330	1KHz,1V	1.86+0	0.32
SCDS74T-391 □ -N	390	1KHz,1V	2.85+0	0.29
SCDS74T-471 □ -N	470	1KHz,1V	3.01+0	0.26
SCDS74T-561 □ -N	560	1KHz,1V	3.62+0	0.23
SCDS74T-681 □ -N	680	1KHz,1V	4.63+0	0.22
SCDS74T-821 □ -N	820	1KHz,1V	5.2+0	0.2
SCDS74T-102 □ -N	1000	1KHz,1V	6.0+0	0.18

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.Inductance drop = 10% typ. at IDC

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCDS104R-1R5 □-N	1.5	100KHz,1V	0.0081+0	10
SCDS104R-2R5 □-N	2.5	100KHz,1V	0.0105+0	7.5
SCDS104R-3R8 □-N	3.8	100KHz,1V	0.013+0	6
SCDS104R-5R2 □-N	5.2	100KHz,1V	0.022+0	5.5
SCDS104R-6R8 □-N	6.8	100KHz,1V	0.027+0	5
SCDS104R-7R0 □-N	7	100KHz,1V	0.027+0	4.8
SCDS104R-100 □-N	10	100KHz,1V	0.035+0	4.4
SCDS104R-150 □-N	15	100KHz,1V	0.050+0	3.6
SCDS104R-220 □-N	22	100KHz,1V	0.073+0	2.9
SCDS104R-330 □-N	33	100KHz,1V	0.093+0	2.3
SCDS104R-390 □-N	39	100KHz,1V	0.128+0	2.1
SCDS104R-470 □-N	47	100KHz,1V	0.128+0	2.1
SCDS104R-680 □-N	68	100KHz,1V	0.213+0	1.5
SCDS104R-820 □-N	82	100KHz,1V	0.290+0	1.4
SCDS104R-101 □-N	100	100KHz,1V	0.304+0	1.35
SCDS104R-151 □-N	150	100KHz,1V	0.506+0	1.15
SCDS104R-201 □-N	200	100KHz,1V	0.756+0	0.92
SCDS104R-221 □-N	220	100KHz,1V	0.756+0	0.92
SCDS104R-331 □-N	330	100KHz,1V	1.090+0	0.7

NOTE : □-tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.Inductance drop = 10% typ. at IDC

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCDS124T-3R3 □-N	3.3	100KHz,1V	0.015+0	6.5
SCDS124T-3R9 □-N	3.9	100KHz,1V	0.015+0	6.5
SCDS124T-4R7 □-N	4.7	100KHz,1V	0.018+0	5.7
SCDS124T-6R8 □-N	6.8	100KHz,1V	0.023+0	4.9
SCDS124T-100 □-N	10	100KHz,1V	0.028+0	4.5
SCDS124T-120 □-N	12	100KHz,1V	0.038+0	4
SCDS124T-150 □-N	15	100KHz,1V	0.050+0	3.2
SCDS124T-180 □-N	18	100KHz,1V	0.057+0	3.1
SCDS124T-220 □-N	22	100KHz,1V	0.066+0	2.9
SCDS124T-270 □-N	27	100KHz,1V	0.080+0	2.8
SCDS124T-330 □-N	33	100KHz,1V	0.097+0	2.7
SCDS124T-390 □-N	39	100KHz,1V	0.132+0	2.1
SCDS124T-470 □-N	47	100KHz,1V	0.150+0	1.9
SCDS124T-560 □-N	56	100KHz,1V	0.190+0	1.8
SCDS124T-680 □-N	68	100KHz,1V	0.220+0	1.5
SCDS124T-820 □-N	82	100KHz,1V	0.260+0	1.3
SCDS124T-101 □-N	100	100KHz,1V	0.308+0	1.2
SCDS124T-121 □-N	120	100KHz,1V	0.380+0	1.1
SCDS124T-151 □-N	150	100KHz,1V	0.530+0	0.95
SCDS124T-181 □-N	180	100KHz,1V	0.620+0	0.85
SCDS124T-221 □-N	220	100KHz,1V	0.700+0	0.8
SCDS124T-271 □-N	270	100KHz,1V	0.876+0	0.6
SCDS124T-331 □-N	330	100KHz,1V	0.990+0	0.5

NOTE : □-tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.Inductance drop = 10% typ. at IDC

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCDS125T-3R3 □-N	3.3	1KHz,1V	0.0158+0	8
SCDS125T-4R7 □-N	4.7	1KHz,1V	0.018+0	7.6
SCDS125T-100 □-N	10	1KHz,1V	0.025+0	4
SCDS125T-120 □-N	12	1KHz,1V	0.027+0	3.5
SCDS125T-150 □-N	15	1KHz,1V	0.03+0	3.3
SCDS125T-180 □-N	18	1KHz,1V	0.034+0	3
SCDS125T-220 □-N	22	1KHz,1V	0.036+0	2.8
SCDS125T-270 □-N	27	1KHz,1V	0.051+0	2.3
SCDS125T-330 □-N	33	1KHz,1V	0.057+0	2.1
SCDS125T-390 □-N	39	1KHz,1V	0.068+0	2
SCDS125T-470 □-N	47	1KHz,1V	0.075+0	1.8
SCDS125T-560 □-N	56	1KHz,1V	0.11+0	1.7
SCDS125T-680 □-N	68	1KHz,1V	0.12+0	1.5
SCDS125T-820 □-N	82	1KHz,1V	0.14+0	1.4
SCDS125T-101 □-N	100	1KHz,1V	0.16+0	1.3
SCDS125T-121 □-N	120	1KHz,1V	0.17+0	1.1
SCDS125T-151 □-N	150	1KHz,1V	0.23+0	1
SCDS125T-181 □-N	180	1KHz,1V	0.29+0	0.9
SCDS125T-221 □-N	220	1KHz,1V	0.4+0	0.8
SCDS125T-271 □-N	270	1KHz,1V	0.46+0	0.75
SCDS125T-331 □-N	330	1KHz,1V	0.51+0	0.68
SCDS125T-391 □-N	390	1KHz,1V	0.69+0	0.65
SCDS125T-471 □-N	470	1KHz,1V	0.77+0	0.58
SCDS125T-561 □-N	560	1KHz,1V	0.86+0	0.54
SCDS125T-681 □-N	680	1KHz,1V	1.2+0	0.48
SCDS125T-821 □-N	820	1KHz,1V	1.34+0	0.43
SCDS125T-102 □-N	1000	1KHz,1V	1.53+0	0.4

NOTE : □-tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.Inductance drop = 10% typ. at IDC

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	IDC(A)Max
SCDS127T-1R2 □-N	1.2	100KHz,1V	0.007+0	9.8
SCDS127T-2R4 □-N	2.4	100KHz,1V	0.0115+0	8
SCDS127T-3R3 □-N	3.3	100KHz,1V	0.0135+0	7.5
SCDS127T-3R5 □-N	3.5	100KHz,1V	0.0135+0	7.5
SCDS127T-4R7 □-N	4.7	100KHz,1V	0.0158+0	6.8
SCDS127T-6R1 □-N	6.1	100KHz,1V	0.0176+0	6.6
SCDS127T-7R6 □-N	7.6	100KHz,1V	0.02+0	5.9
SCDS127T-100 □-N	10	1KHz,1V	0.0216+0	5.4
SCDS127T-120 □-N	12	1KHz,1V	0.0243+0	4.9
SCDS127T-150 □-N	15	1KHz,1V	0.027+0	4.5
SCDS127T-180 □-N	18	1KHz,1V	0.0392+0	3.9
SCDS127T-220 □-N	22	1KHz,1V	0.0432+0	3.6
SCDS127T-270 □-N	27	1KHz,1V	0.0459+0	3.4
SCDS127T-330 □-N	33	1KHz,1V	0.0648+0	3
SCDS127T-390 □-N	39	1KHz,1V	0.0729+0	2.75
SCDS127T-470 □-N	47	1KHz,1V	0.1+0	2.5
SCDS127T-560 □-N	56	1KHz,1V	0.11+0	2.35
SCDS127T-680 □-N	68	1KHz,1V	0.14+0	2.1
SCDS127T-820 □-N	82	1KHz,1V	0.16+0	1.95
SCDS127T-101 □-N	100	1KHz,1V	0.22+0	1.7
SCDS127T-121 □-N	120	1KHz,1V	0.25+0	1.6
SCDS127T-151 □-N	150	1KHz,1V	0.28+0	1.42
SCDS127T-181 □-N	180	1KHz,1V	0.35+0	1.3
SCDS127T-221 □-N	220	1KHz,1V	0.39+0	1.16
SCDS127T-271 □-N	270	1KHz,1V	0.56+0	1.06
SCDS127T-331 □-N	330	1KHz,1V	0.64+0	0.95
SCDS127T-391 □-N	390	1KHz,1V	0.7+0	0.88
SCDS127T-471 □-N	470	1KHz,1V	0.98+0	0.79
SCDS127T-561 □-N	560	1KHz,1V	1.07+0	0.73
SCDS127T-681 □-N	680	1KHz,1V	1.46+0	0.67
SCDS127T-821 □-N	820	1KHz,1V	1.64+0	0.6
SCDS127T-102 □-N	1000	1KHz,1V	1.82+0	0.55

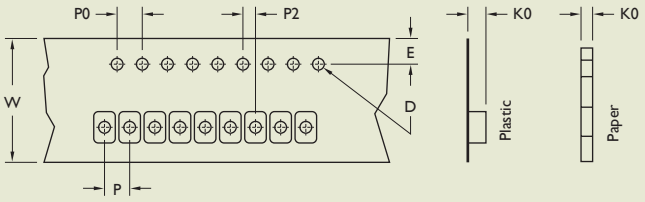
NOTE : □-tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

2.Inductance drop = 10% typ. at IDC

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

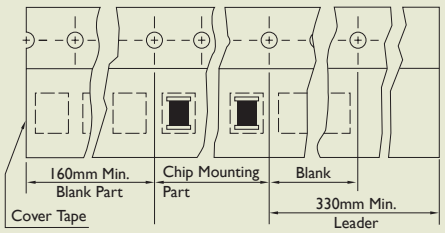
TAPE DIMENSIONS



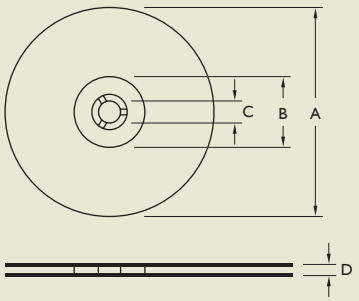
TAPE MATERIAL

Carrier Tape : Polystyrene

Cover Type : Polyethylene

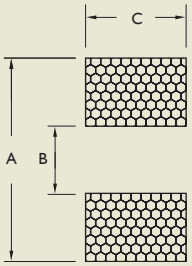


REEL DIMENSIONS



RECOMMENDED PATTERN

Land Pattern



Dimensions : mm

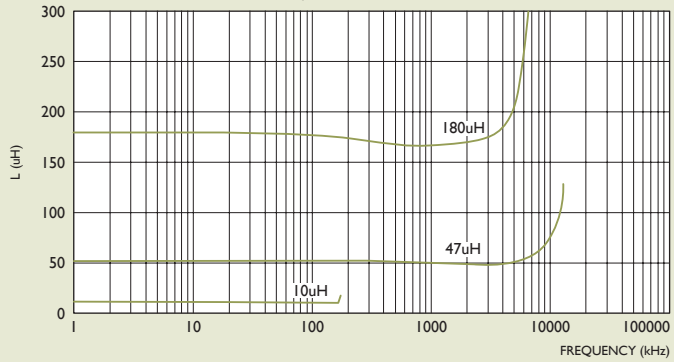
TYPE	TAPE DIMENSIONS							RECOMMENDED PATTERN			REEL DIMENSIONS				QUANTITY
	K0	D	E	W	P	P0	P2	A	B	C	A	B	C	D	PCS/REEL
SCDS62	3.4	1.55	1.75	16	12	4	2	8.1	4	2.5	330	100	13	17.4	1500
SCDS64	4.9	1.55	1.75	16	12	4	2	8.1	4	2.5	330	100	13	17.4	1000
SCDS73	3.6	1.55	1.75	16	12	4	2	8.4	4.4	2.2	330	100	13	17.4	1600
SCDS74	5.0	1.55	1.75	16	12	4	2	8.4	4.4	2.2	330	100	13	17.4	1000
SCDS124	5.1	1.55	1.75	24	16	4	2	13	7	5.4	330	100	13	24.4	500
SCDS125	6.7	1.55	1.75	24	16	4	2	13	7	5.4	330	100	13	24.4	600
SCDS127	8.7	1.55	1.75	24	16	4	2	13	7	5.4	330	100	13	24.4	500
SCDS104R	4.1	1.50	1.75	24	16	4	2	10.7	7.3	3.2	330	100	13	24.4	1000

TYPICAL ELECTRICAL CHARACTERISTICS

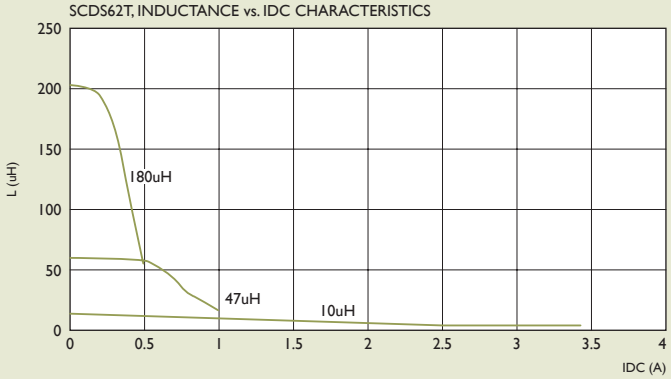
Curves of SCDS Series

Test Instruments : HP4291A Impedance / Material Analyzer

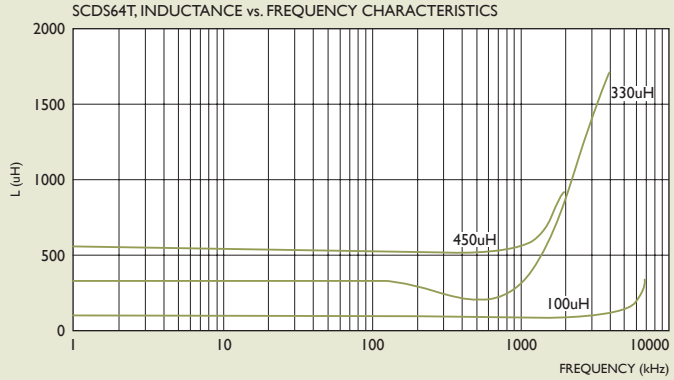
SCDS62T, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



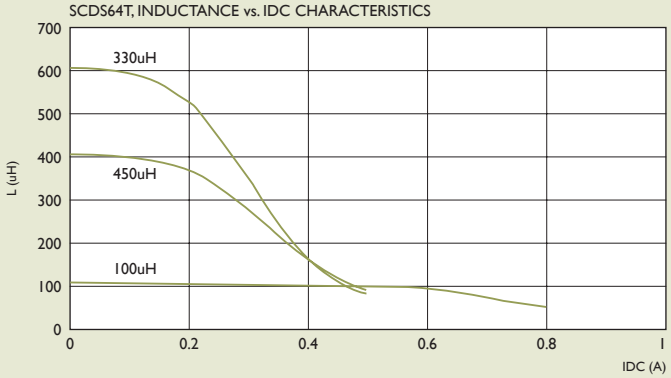
SCDS62T, INDUCTANCE vs. IDC CHARACTERISTICS



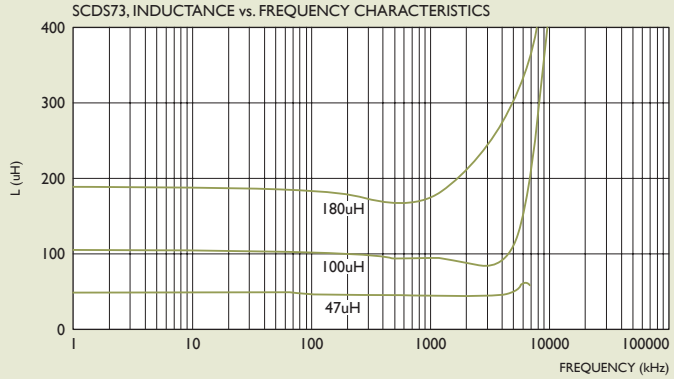
SCDS64T, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



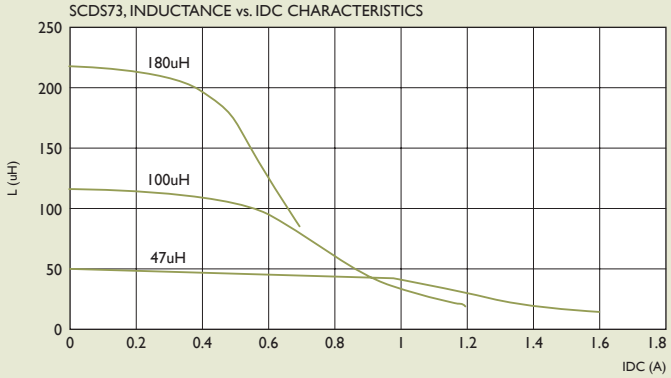
SCDS64T, INDUCTANCE vs. IDC CHARACTERISTICS



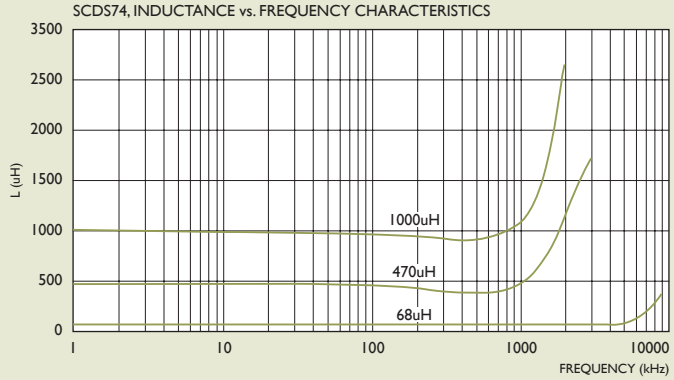
SCDS73, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



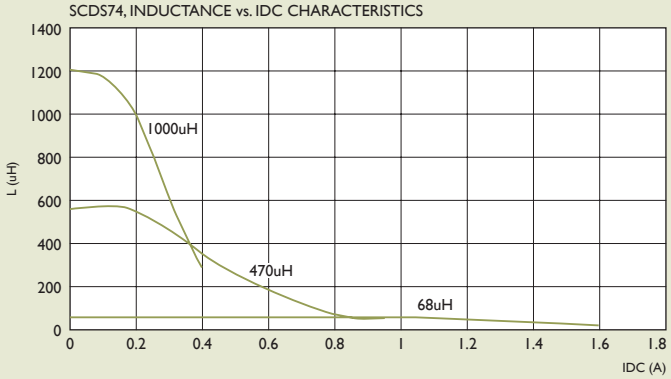
SCDS73, INDUCTANCE vs. IDC CHARACTERISTICS



SCDS74, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



SCDS74, INDUCTANCE vs. IDC CHARACTERISTICS

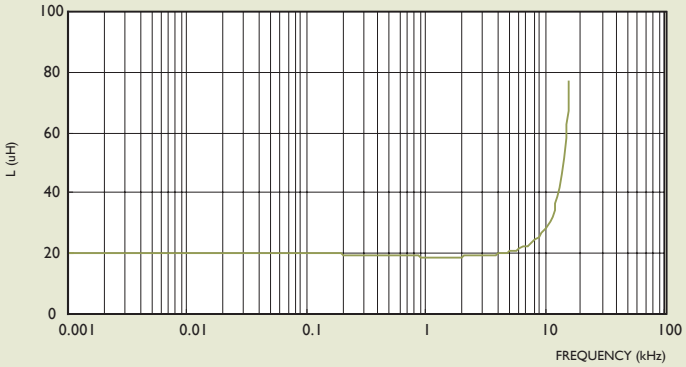


TYPICAL ELECTRICAL CHARACTERISTICS

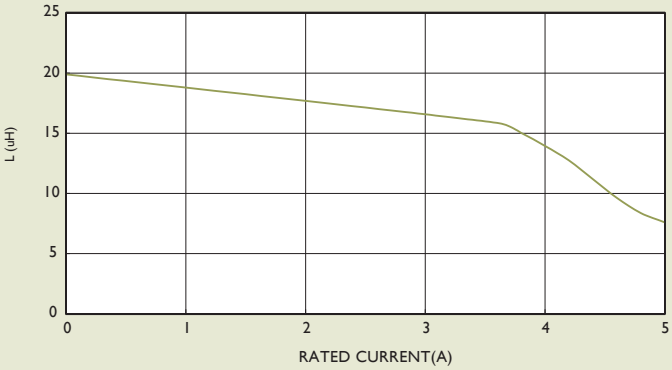
TCurves of SCDS Series

Test Instruments : HP4291A Impedance / Material Analyzer

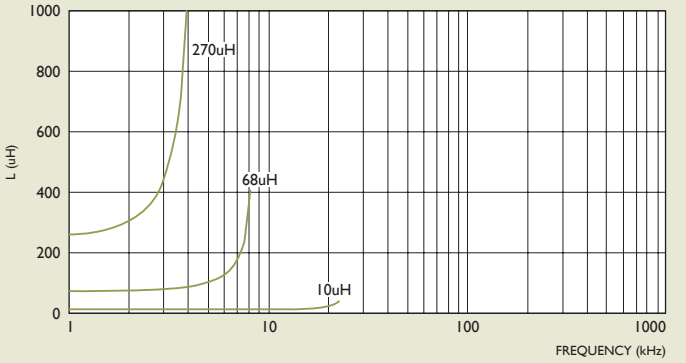
SCDS104R-220MS, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



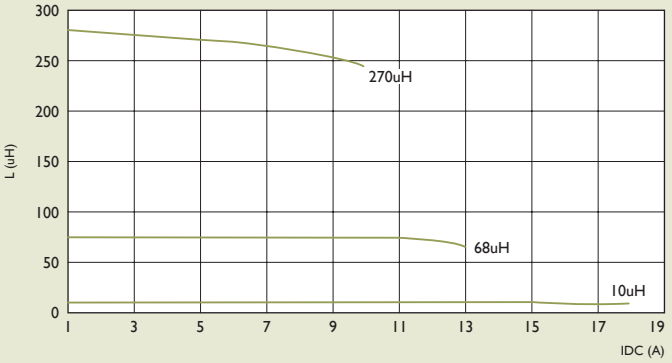
SCDS104R-220M-S



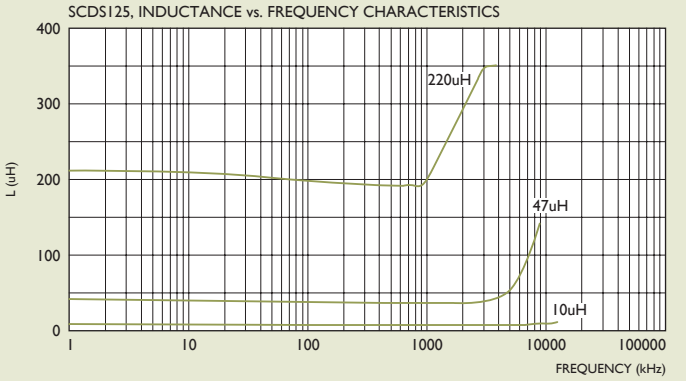
SCDS124, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



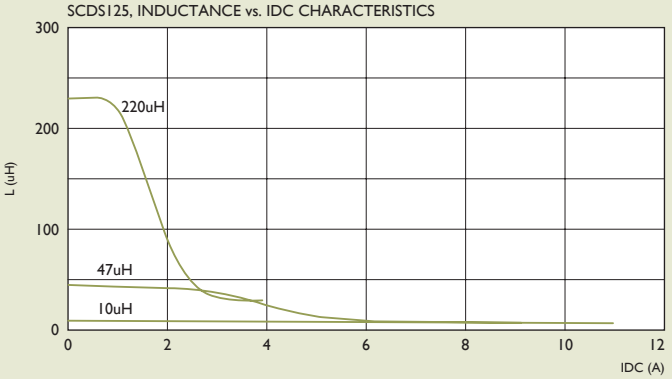
SCDS124, INDUCTANCE vs. IDC CHARACTERISTICS



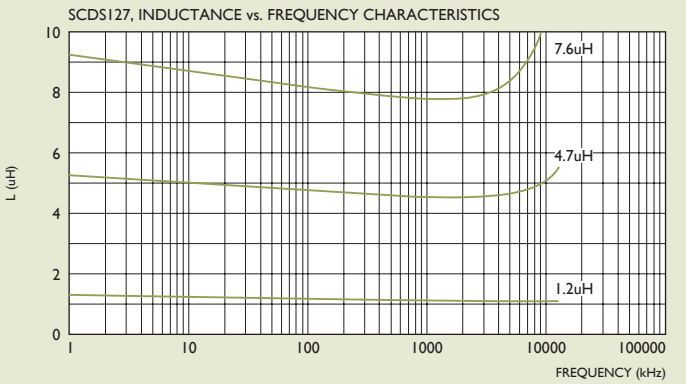
SCDS125, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



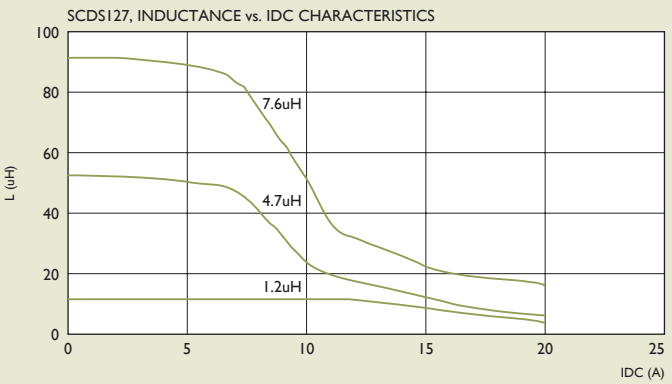
SCDS125, INDUCTANCE vs. IDC CHARACTERISTICS



SCDS127, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



SCDS127, INDUCTANCE vs. IDC CHARACTERISTICS



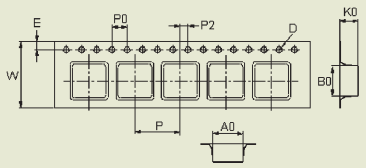
TYPICAL ELECTRICAL CHARACTERISTICS

Test Instruments : HP4291A Impedance / Material Analyzer

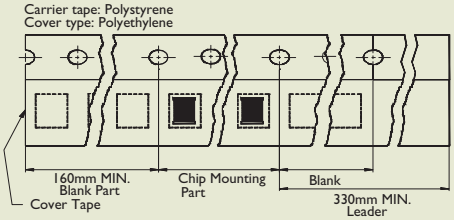
Packaging Specifications

SCDS 2D11 ~ 6D38

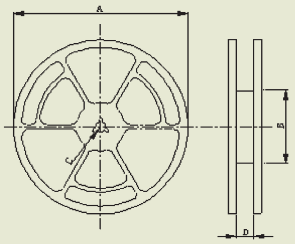
Tape Dimensions



Tape Material



Reel Dimensions

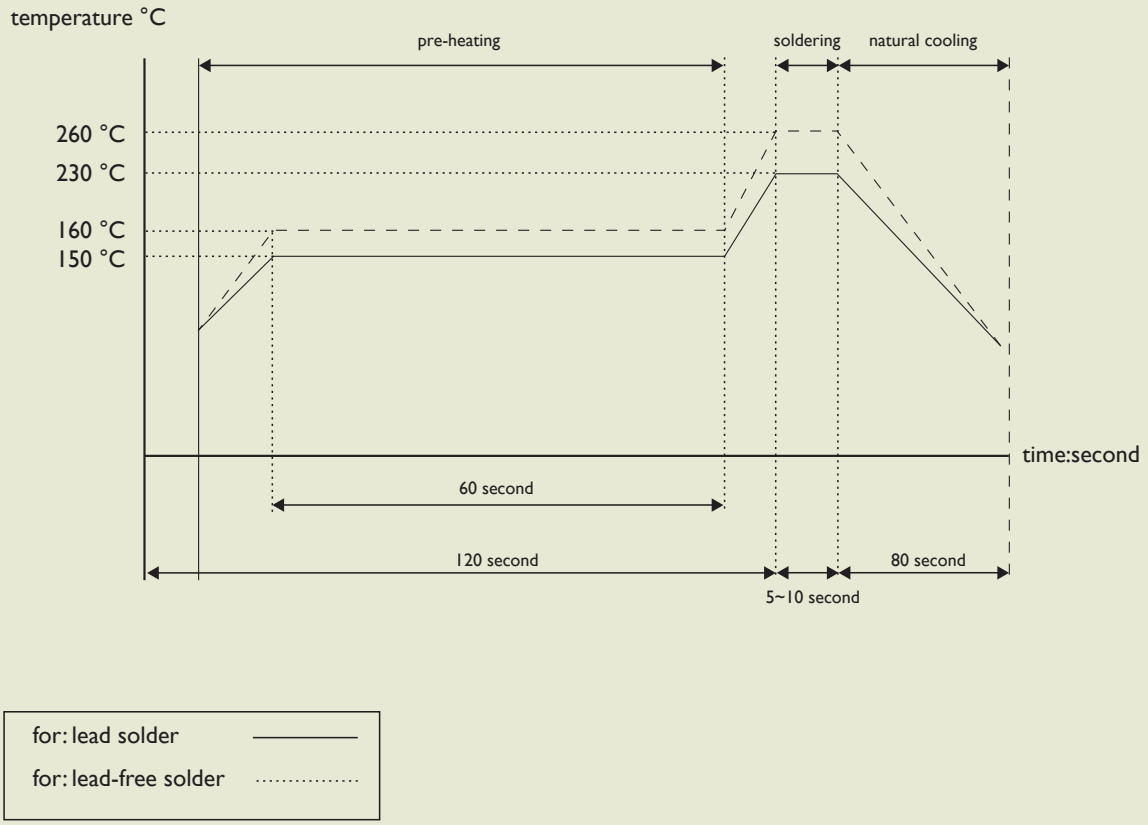


Dimensions : mm

TYPE	TAPA DIMENSIONS									REEL DIMENSIONS				QUANTITY	RECOMMENDED PATTERN	
	A0	B0	K0	D	E	W	P	P0	P2	A	B	C	D	PCS/REEL	A	B
ZSCD2D11	3.3	3.3	1.3	1.5	1.75	12	8	4	2	178	60	13	13.2	1500	1.3	1.7
SCD2D14	3.3	3.3	1.6	1.5	1.75	12	8	4	2	178	60	13	13.2	1000	1.3	1.7
SCDS2S18LD	3.3	3.3	1.9	1.5	1.75	12	8	4	2	178	60	13	13.2	1000	1.3	1.7
SCDS2S18HP	3.3	3.3	1.9	1.5	1.75	12	8	4	2	178	60	13	13.2	1000	1.3	1.7
SCDS3D12	4.2	4.2	1.25	1.5	1.75	12	8	4	2	330	100	13	13.4	5000	4.6	1.6
SCDS3D16	4.3	4.3	2.1	1.5	1.75	12	8	4	2	178	60	13	13.2	1000	1.4	2.4
SCDS4D18	5.3	5.3	2.4	1.5	1.75	12	8	4	2	330	100	13	13.4	2000	1.9	1.5
SCDS4D28	5.3	5.3	3.4	1.5	1.75	12	8	4	2	330	100	13	13.4	2000	1.9	1.5
SCDS5D18	6.2	6.2	2.2	1.5	1.75	12	8	4	2	330	100	13	13.4	2000	2.15	2.0
SCDS5D28	6.2	6.2	3.2	1.5	1.75	12	8	4	2	330	100	13	13.4	2000	2.15	2.0
SCDS6D28	7.2	7.2	3.2	1.5	1.75	16	12	4	2	330	100	13	17.4	1500	2.65	2.0
SCDS6D38	7.1	7.1	4.1	1.5	1.75	16	12	4	2	330	100	13	17.4	1000	2.65	2.0

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters, Transformers, Current Sensors



for: lead solder ——————

for: lead-free solder ·····

SCDS Series

Shielded SMD Power Inductors

APPLICATIONS

- Power Supply for VTRs
- OA Equipment
- LCD Televisions
- Notebook PCs
- Portable Communication Equipment
- DC / DC Converters, etc.

PRODUCT IDENTIFICATION

SCDS□□□□ □·□□□□·□

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

- T : Packing : Tape and Reel
- HP : Low DCR
- LD : High Power
- Tolerance : K=±10% M=±20% T=±30%
- Internal No.: B: Silver plated terminals (3D12~6D38); S: Base type terminals (2D11~2D18HP & 62T&127)
- Note : YAGEO will start to release lead-free terminals that meet SONY SS-00259's criterial and YAGEO Internal No will changed to "N" as identification.

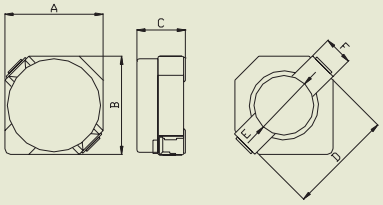
FEATURES

- Available in Magnetically Dhielded
- Low DC Resistance
- Suitable for Large Currents
- Ideal for a Variety of DC - DC Converter Inductor Applications
- Available on Tape and Reel for Auto Surface Mounting

SHAPES AND DIMENSIONS

Dimensions : mm

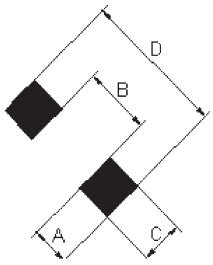
SCDS2D11/2D14
/2D18LD/2D18HP



Dimensions in mm

TYPE	A	B	C	D	E	F
SCDS2D11	3.2^{+0}	3.2^{+0}	1.2^{+0}	3.3	2.1	1.0
SCDS2D14	3.2^{+0}	3.2^{+0}	1.55^{+0}	3.3	2.1	1.0
SCDS2D18LD	3.2^{+0}	3.2^{+0}	2.0^{+0}	3.3	2.1	1.0
SCDS2D18HP	3±0.3	3±0.3	2.0^{+0}	3.3	2.1	1.0

RECOMMENDED PATTERN



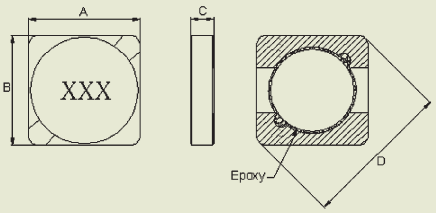
Dimensions in mm

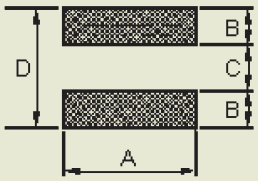
TYPE	A	B	C	D
S CDS 2D11	1.3	1.7	1.3	4.3
S CDS 2D14	1.3	1.7	1.3	4.3
S CDS 2D18LD	1.3	1.7	1.3	4.3
S CDS 2D18HP	1.3	1.7	1.3	4.3

SHAPES AND DIMENSIONS

RECOMMENDED PATTERN

SCDS 3D12





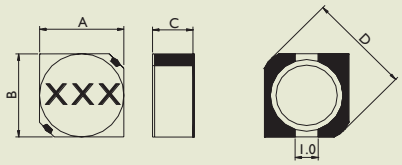
Dimensions in mm

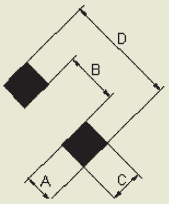
TYPE	A		B		C	D
SCDS3D12	3.9	0.2	3.9	0.2	1.2 Max	6.2 Max

Dimensions in mm

TYPE	A	B	C	D
SCDS3D12	4.6	1.6	1.4	4.6

SCDS 3D16





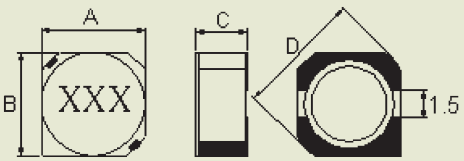
Dimensions in mm

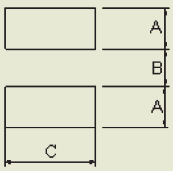
TAPE	A	B	C	D
SCDS3D16	4 Max.	4 Max.	1.8 Max.	5.2 Max.

Dimensions in mm

TYPE	A	B	C	D
SCDS3D16	1.4	2.4	1.5	5.2

SCDS 4D18~6D38



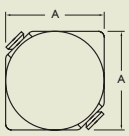


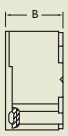
Dimensions in mm

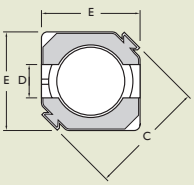
TAPE	A		B		C	D
SCDS4D18	4.7	0.3	4.7	0.3	2.0 Max	6.9 Max
SCDS4D28	4.7	0.3	4.7	0.3	3.0 Max	6.9 Max

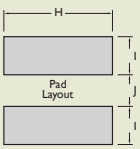
Dimensions in mm

TYPE	A	B	C
S CDS 4D18	1.9	1.5	5.3
S CDS 4D28	1.9	1.5	5.3









ITEM	A	B	C	D	E	H	I	J
5D18	5.7 ± 0.3	2.0 Max.	8.2 Max.	1.5	5.7±0.3	6.3	2.15	2.0
5D28	5.7 ± 0.3	3.0 Max.	8.2 Max.	1.5	5.7±0.3	6.3	2.15	2.0
6D28	6.7 ± 0.3	3.0 Max.	9.5 Max.	1.5	6.7±0.3	7.3	2.65	2.0
6D38	7.0 ± 0.0	4.0 Max.	9.5 Max.	1.5	7.0±0.0	7.3	2.65	2.0

ELECTRICAL CHARACTERISTICS

Standard Specifications

Stamp	Inductance (H)	D.C.R.(mΩ)Max.												RatedCurrent(A)Max.											
		SCDS 2D11	SCDS 2D14	SCDS 2D18LD	SCDS 2D18HP	SCDS 3D12	SCDS 3D16	SCDS 4D18	SCDS 4D28	SCDS 5D18	SCDS 5D28	SCDS 6D28	SCDS 6D38	SCDS 2D11	SCDS 2D14	SCDS 2D18LD	SCDS 2D18HP	SCDS 3D12	SCDS 3D16	SCDS 4D18	SCDS 4D28	SCDS 5D18	SCDS 5D28	SCDS 6D28	SCDS 6D38
R47			40												2										
1R0	1.0					40.1±30%		45										1.54		1.72					
1R2	1.2								23.6												2.56				
1R5	1.5	68	63			63.5±30%	52							0.90	1.80			1.32	1.55						
1R7					44												1.85								
1R8	1.8		75						27.5						1.65						2.20				
2R2	2.2	98	94	41	60	83.5±30%	72	75	31.3					0.78	1.50	0.85	1.6	1.12	1.20	1.32	2.04				
2R4	2.4																								
2R5	2.5										18												2.60		
2R7	2.7		106					105	43.3	52					1.35					1.28	1.60	2.1			
3R0	3.0										24	24											2.40	3.00	
3R3	3.3	123	125	54	86	122±30%	85	110	49.2				20	0.60	1.20	0.75	1.45	0.90	1.10	1.04	1.57				3.50
3R5	3.5																								
3R8	3.8																								
3R9	3.9	160	138					155	64.8			27		0.60	1.10					0.88	1.44			2.60	
4R1	4.1									57												1.95			
4R2	4.2										31												2.20		
4R7	4.7	170	169	78	140	172±30%	105	162	72.0		38	31	22	0.50	1.00	0.63	1.2	0.72	0.90	0.84	1.32		1.90	2.40	3.10
5R0	5.0											31	24											2.40	2.90
5R2	5.2																								
5R3	5.3										38												1.90		
5R4	5.4									76												1.60			
5R5	5.5																								
5R6	5.6		188			191±30%		170	100.9			35			0.95			0.66		0.80	1.17			2.25	
6R0	6.0											35												2.25	
6R1	6.1																								
6R2	6.2									96	45		27									1.40	1.80		2.50
6R3					160												1.05								
6R8	6.8	260	213	106		218±30%	170	200	108.9	100	50	52	29	0.44	0.85	0.52		0.60	0.73	0.76	1.12	1.55	1.65	2.10	2.40
7R0	7.0																								
7R3	7.3											54												2.10	
7R4	7.4												31												2.30
7R6	7.6																								
8R2	8.2		281			255±30%		245	117.5		53				0.80			0.57		0.68	1.04		1.60		
8R6	8.6											58												1.85	
8R7	8.7												34												2.20
8R9	8.9									116												1.25			
100	10	400	294	180	245	4083±0%	210	280	128.3	124	65	65	38	0.35	0.70	0.43	0.85	0.49	0.55	0.61	1.00	1.20	1.30	1.70	2.00
120	12		394			462±30%		320	131.6	153	76	70	53		0.62			0.47		0.56	0.84	1.10	1.20	1.55	1.70
150	15			220	345	502±30%	295	360	149.0	196	103	84	57			0.35	0.7	0.41	0.45	0.50	0.76	0.97	1.10	1.40	1.60
180	18					573±30%		400	166.0	210	110	95	92					0.37		0.48	0.75	0.85	1.00	1.32	1.50
220	22	950		320		801±30%	430	480	235.0	290	122	128	96	0.16		0.30		0.34	0.40	0.41	0.70	0.80	0.90	1.20	1.30
270	27					1207±30%	620	570	261.0	330	175	142	109					0.30	0.62	0.35	0.58	0.75	0.85	1.05	1.20
330	33			460		1358±30%	675	694	331.3	386	189	165	124			0.24		0.28	0.32	0.32	0.56	0.65	0.75	0.97	1.10
390	39					1911±30%		800	383.7	520	212	210	138					0.23		0.30	0.50	0.57	0.70	0.86	1.00
470	47			660			1240	950	587.0	595	250	238	150			0.20			0.26	0.28	0.48	0.54	0.62	0.80	0.95
560	56							1080	624.5	665	305	277	202							0.26	0.41	0.50	0.58	0.73	0.85
680	68							1300	699.0	840	355	304	234							0.24	0.35	0.43	0.52	0.65	0.75
820	82								914.8	978	463	390	324								0.32	0.41	0.46	0.60	0.70
101	100								1020	1200	520	535	358								0.29	0.36	0.42	0.54	0.65
121	120								1270	1600											0.27	0.32			
151	150								1350	1800											0.24	0.30			
181	180								1540												0.22				
221	220																								
271	270																								
331	330																								
391	390																								
471	470																								

• Test Freq.(L): SCDS3D12/3D16:(100KHz/0.1V)
SCDS4D18: 1.0 ~ 8.2H(7.96MHz/1V), 10 ~ 39H(100KHz/1V)
SCDS2D11/2D14/2D18LD/4D28/104R/124: (100KHz/1V)
SCDS5D18/5D28/6D28: (10KHz/1V)
SCDS6D38: (10KHz/0.1V)
SCDS62: 3.3 ~ 8.2H(7.96MHz/1V), 10~82H(2.52MHz/1V), 100 ~ 330H(1KHz/1V)

• SCDS3D12 Rated current : It makes rated current either when the value with 30% declining inductance or the generation of heat becomes 30% near value by the rising one above another of thedirect current.

• Other type Rated current :The rate current indicastes the current when the inductance decreases to 65%. Over of it's nominal value or D.C.current when the temperature rising Dt =40°C lower, whichever is lower.

• Test Instrument :L : HP4192A LF IMPEDANCE ANALYZER
RDC : CHEN HWA 502BC
Rated current: HP4284+42841A or Ch1061+CH301A

Tolerance Of Inductors

• SCDS2D11 1.5~10H 30%(T)
• SCDS2D14 1.5~12H 30%(T)• SCDS2D18LD 2.2~4.7H 30%(T)
• SCDS3D12 1.0~39H 30%(T)
• SCDS3D16 1.5~33H 30%(T)
• SCDS4D18 1.0~68H 30%(T)
• SCDS4D28 1.2~180H 30%(T)
• SCDS5D18 4.1~100H 30%(T)
• SCDS5D28 2.5~100H 30%(T)
• SCDS6D28 3.0~100H 30%(T)
• SCDS6D38 3.3~100H 30%(T)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)	Rated Current(A)Max	Irms(A)Typ	Tolerance
SCDS2D11T-1R5 □-N	1.5	100KHz,1V	0.068+0	0.9	1.48	T
SCDS2D11T-2R2 □-N	2.2	100KHz,1V	0.098+0	0.78	1.27	T
SCDS2D11T-3R3 □-N	3.3	100KHz,1V	0.123+0	0.6	1.02	T
SCDS2D11T-3R9 □-N	3.9	100KHz,1V	0.160+0	0.6	-	T
SCDS2D11T-4R7 □-N	4.7	100KHz,1V	0.170+0	0.5	0.88	T
SCDS2D11T-6R8 □-N	6.8	100KHz,1V	0.260+0	0.44	0.8	T
SCDS2D11T-100 □-N	10	100KHz,1V	0.400+0	0.35	0.65	M,T
SCDS2D11T-220 □-N	22	100KHz,1V	0.950+0	0.16	-	M,T

NOTE : □-tolerance M=±20% / T=±30%

1.Operating temperature range -40°C~85°C(Includes temperature when the coil is heated)

2.Rate current: Inductance drop = 35% typ.

3.Irms:Δt=40°C

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)	Rated Current(A)Max	Irms(A)Typ	Tolerance
SCDS2D14T-R47 □-N	0.47	100KHz,1V	0.040+0	2	-	T
SCDS2D14T-1R5 □-N	1.5	100KHz,1V	0.063+0	1.8	2	T
SCDS2D14T-1R8 □-N	1.8	100KHz,1V	0.075+0	1.65	1.8	T
SCDS2D14T-2R2 □-N	2.2	100KHz,1V	0.094+0	1.5	1.6	T
SCDS2D14T-2R7 □-N	2.7	100KHz,1V	0.106+0	1.35	1.4	T
SCDS2D14T-3R3 □-N	3.3	100KHz,1V	0.125+0	1.2	1.24	T
SCDS2D14T-3R9 □-N	3.9	100KHz,1V	0.138+0	1.1	1.12	T
SCDS2D14T-4R7 □-N	4.7	100KHz,1V	0.169+0	1	1	M,T
SCDS2D14T-5R6 □-N	5.6	100KHz,1V	0.188+0	0.95	0.98	M,T
SCDS2D14T-6R8 □-N	6.8	100KHz,1V	0.213+0	0.85	0.92	M,T
SCDS2D14T-8R2 □-N	8.2	100KHz,1V	0.281+0	0.8	0.8	M,T
SCDS2D14T-100 □-N	10	100KHz,1V	0.294+0	0.7	0.76	M,T
SCDS2D14T-120 □-N	12	100KHz,1V	0.394+0	0.62	0.64	M,T

NOTE : □-tolerance M=±20% / T=±30%

1.Operating temperature range -40°C~85°C(Includes temperature when the coil is heated)

2.Rate current: Inductance drop = 35% typ.

3.Irms:Δt=40°C

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)	Rated Current(A)Max	Irms(A)Typ	Tolerance
SCDS2D18LD-2R2 □-N	2.2	100KHz,1V	0.041+0	0.85	2.3	M,T
SCDS2D18LD-3R3 □-N	3.3	100KHz,1V	0.054+0	0.75	2.1	M,T
SCDS2D18LD-4R7 □-N	4.7	100KHz,1V	0.078+0	0.63	1.65	M,T
SCDS2D18LD-6R8 □-N	6.8	100KHz,1V	0.106+0	0.52	1.32	M,T
SCDS2D18LD-100 □-N	10	100KHz,1V	0.180+0	0.43	1	M,T
SCDS2D18LD-150 □-N	15	100KHz,1V	0.220+0	0.35	0.8	M,T
SCDS2D18LD-220 □-N	22	100KHz,1V	0.320+0	0.3	0.68	M,T
SCDS2D18LD-330 □-N	33	100KHz,1V	0.460+0	0.24	0.56	M,T
SCDS2D18LD-470 □-N	47	100KHz,1V	0.660+0	0.2	0.48	M,T

NOTE : □-tolerance M=±20% / T=±30%

1.Operating temperature range -40°C~85°C(Includes temperature when the coil is heated)

2.Rate current: Inductance drop = 35% typ.

3.Irms:Δt=40°C

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)	Rated Current(A)Max	Irms(A)Typ	Tolerance
SCDS2D18HP-1R7 □-N	1.7	100KHz,1V	0.044+0	1.85	2.2	M,T
SCDS2D18HP-2R2 □-N	2.2	100KHz,1V	0.060+0	1.6	1.9	M,T
SCDS2D18HP-3R3 □-N	3.3	100KHz,1V	0.086+0	1.45	1.55	M,T
SCDS2D18HP-4R7 □-N	4.7	100KHz,1V	0.140+0	1.2	1.2	M,T
SCDS2D18HP-6R3 □-N	6.3	100KHz,1V	0.160+0	1.05	1.15	M,T
SCDS2D18HP-100 □-N	10	100KHz,1V	0.245+0	0.85	0.9	M,T
SCDS2D18HP-150 □-N	15	100KHz,1V	0.345+0	0.7	0.64	M,T

NOTE : □-tolerance M=±20% / T=±30%

1.Operating temperature range -40°C~85°C(Includes temperature when the coil is heated)

2.Rate current: Inductance drop = 35% typ.

3.Irms:Δt=40°C

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	Rated current(A)Max
SCDS3D12T-1R0 □-N	1	10KHz,0.1V	0.0401±30%	1.54
SCDS3D12T-1R5 □-N	1.5	10KHz,0.1V	0.0635±30%	1.32
SCDS3D12T-2R2 □-N	2.2	10KHz,0.1V	0.0835±30%	1.12
SCDS3D12T-3R3 □-N	3.3	10KHz,0.1V	0.122±30%	0.9
SCDS3D12T-4R7 □-N	4.7	10KHz,0.1V	0.172±30%	0.72
SCDS3D12T-5R6 □-N	5.6	10KHz,0.1V	0.191±30%	0.66
SCDS3D12T-6R8 □-N	6.8	10KHz,0.1V	0.218±30%	0.6
SCDS3D12T-8R2 □-N	8.2	10KHz,0.1V	0.255±30%	0.57
SCDS3D12T-100 □-N	10	10KHz,0.1V	0.408±30%	0.49
SCDS3D12T-120 □-N	12	10KHz,0.1V	0.462±30%	0.47
SCDS3D12T-150 □-N	15	10KHz,0.1V	0.502±30%	0.41
SCDS3D12T-180 □-N	18	10KHz,0.1V	0.573±30%	0.37
SCDS3D12T-220 □-N	22	10KHz,0.1V	0.801±30%	0.34
SCDS3D12T-270 □-N	27	10KHz,0.1V	1.207±30%	0.3
SCDS3D12T-330 □-N	33	10KHz,0.1V	1.358±30%	0.28
SCDS3D12T-390 □-N	39	10KHz,0.1V	1.911±30%	0.23

NOTE : □-tolerance T=±30%

1.Operating temperature range -40°C~85°C(Includes temperature when the coil is heated)

2.Rate current: The rate current indicates the current when the inductance decreases to 70% over of it's nominal value or D.C.current when the temperature rising ΔT=40°C lower, whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	Rated current(A)Max
SCDS3D16T-1R5 □-B-N	1.5	100KHz,0.1V	0.052+0	1.55
SCDS3D16T-2R2 □-B-N	2.2	100KHz,0.1V	0.072+0	1.2
SCDS3D16T-3R3 □-B-N	3.3	100KHz,0.1V	0.085+0	1.1
SCDS3D16T-4R7 □-B-N	4.7	100KHz,0.1V	0.105+0	0.9
SCDS3D16T-6R8 □-B-N	6.8	100KHz,0.1V	0.170+0	0.73
SCDS3D16T-100 □-B-N	10	100KHz,0.1V	0.210+0	0.55
SCDS3D16T-150 □-B-N	15	100KHz,0.1V	0.295+0	0.45
SCDS3D16T-220 □-B-N	22	100KHz,0.1V	0.430+0	0.4
SCDS3D16T-270 □-B-N	27	100KHz,0.1V	0.620+0	0.62
SCDS3D16T-330 □-B-N	33	100KHz,0.1V	0.675+0	0.32
SCDS3D16T-470 □-B-N	47	100KHz,0.1V	1.240+0	0.26

NOTE : □-tolerance T=±30%

1.Operating temperature range -40°C~85°C(Includes temperature when the coil is heated)

2.Rate current: The rate current indicates the current when the inductance decreases to 70% over of it's nominal value or D.C.current when the temperature rising ΔT=40°C lower, whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	Rated current(A)Max
SCDS4D28T-1R0 □-B-N	1	7.96MHz,1V	0.045+0	1.72
SCDS4D28T-2R2 □-B-N	2.2	7.96MHz,1V	0.075+0	1.32
SCDS4D28T-2R7 □-B-N	2.7	7.96MHz,1V	0.105+0	1.28
SCDS4D28T-3R3 □-B-N	3.3	7.96MHz,1V	0.110+0	1.04
SCDS4D28T-3R9 □-B-N	3.9	7.96MHz,1V	0.155+0	0.88
SCDS4D28T-4R7 □-B-N	4.7	7.96MHz,1V	0.162+0	0.84
SCDS4D28T-5R6 □-B-N	5.6	7.96MHz,1V	0.170+0	0.8
SCDS4D28T-6R8 □-B-N	6.8	7.96MHz,1V	0.200+0	0.76
SCDS4D28T-8R2 □-B-N	8.2	7.96MHz,1V	0.245+0	0.68
SCDS4D28T-100 □-B-N	10	7.96MHz,1V	0.280+0	0.61
SCDS4D28T-120 □-B-N	12	7.96MHz,1V	0.320+0	0.56
SCDS4D28T-150 □-B-N	15	7.96MHz,1V	0.360+0	0.5
SCDS4D28T-180 □-B-N	18	7.96MHz,1V	0.400+0	0.48
SCDS4D28T-220 □-B-N	22	7.96MHz,1V	0.480+0	0.41
SCDS4D28T-270 □-B-N	27	7.96MHz,1V	0.570+0	0.35
SCDS4D28T-330 □-B-N	33	7.96MHz,1V	0.694+0	0.32
SCDS4D28T-390 □-B-N	39	7.96MHz,1V	0.800+0	0.3
SCDS4D28T-470 □-B-N	47	7.96MHz,1V	0.950+0	0.28
SCDS4D28T-560 □-B-N	56	7.96MHz,1V	1.080+0	0.26
SCDS4D28T-680 □-B-N	68	7.96MHz,1V	1.300+0	0.24

NOTE : □-tolerance T=±30%

1.Operating temperature range -40°C~85°C(Includes temperature when the coil is heated)

2.Rate current: The rate current indicates the current when the inductance decreases to 70% over of it's nominal value or D.C.current when the temperature rising ΔT=40°C lower, whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	Rated current(A)Max
SCDS4D28T-1R2 □-B-N	1.2	100KHz,1V	0.0236+0	2.56
SCDS4D28T-1R8 □-B-N	1.8	100KHz,1V	0.0275+0	2.2
SCDS4D28T-2R2 □-B-N	2.2	100KHz,1V	0.0313+0	2.04
SCDS4D28T-2R7 □-B-N	2.7	100KHz,1V	0.0433+0	1.6
SCDS4D28T-3R3 □-B-N	3.3	100KHz,1V	0.0492+0	1.57
SCDS4D28T-3R9 □-B-N	3.9	100KHz,1V	0.0648+0	1.44
SCDS4D28T-4R7 □-B-N	4.7	100KHz,1V	0.0720+0	1.32
SCDS4D28T-5R6 □-B-N	5.6	100KHz,1V	0.1009+0	1.17
SCDS4D28T-6R8 □-B-N	6.8	100KHz,1V	0.1089+0	1.12
SCDS4D28T-8R2 □-B-N	8.2	100KHz,1V	0.1175+0	1.04
SCDS4D28T-100 □-B-N	10	100KHz,1V	0.1283+0	1
SCDS4D28T-120 □-B-N	12	100KHz,1V	0.1316+0	0.84
SCDS4D28T-150 □-B-N	15	100KHz,1V	0.1490+0	0.76
SCDS4D28T-180 □-B-N	18	100KHz,1V	0.1660+0	0.72
SCDS4D28T-220 □-B-N	22	100KHz,1V	0.2350+0	0.7
SCDS4D28T-270 □-B-N	27	100KHz,1V	0.2610+0	0.58
SCDS4D28T-330 □-B-N	33	100KHz,1V	0.3313+0	0.56
SCDS4D28T-390 □-B-N	39	100KHz,1V	0.3837+0	0.5
SCDS4D28T-470 □-B-N	47	100KHz,1V	0.5870+0	0.48
SCDS4D28T-560 □-B-N	56	100KHz,1V	0.6245+0	0.41
SCDS4D28T-680 □-B-N	68	100KHz,1V	0.6990+0	0.35
SCDS4D28T-820 □-B-N	82	100KHz,1V	0.9140+0	0.32
SCDS4D28T-101 □-B-N	100	100KHz,1V	1.0200+0	0.29
SCDS4D28T-121 □-B-N	120	100KHz,1V	1.2700+0	0.27
SCDS4D28T-151 □-B-N	150	100KHz,1V	1.3500+0	0.24
SCDS4D28T-181 □-B-N	180	100KHz,1V	1.5400+0	0.22

NOTE : □-tolerance T=±30%

1.Operating temperature range -40°C~85°C(Includes temperature when the coil is heated)

2.Rate current: The rate current indicates the current when the inductance decreases to 70% over of it's nominal value or D.C.current when the temperature rising ΔT=40°C lower, whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	Rated current(A)Max
SCDS5D18T-2R7 □-B-N	2.7	10KHz,1V	0.052+0	2.1
SCDS5D18T-4R1 □-B-N	4.1	10KHz,1V	0.057+0	1.95
SCDS5D18T-5R4 □-B-N	5.4	10KHz,1V	0.076+0	1.6
SCDS5D18T-6R2 □-B-N	6.2	10KHz,1V	0.096+0	1.4
SCDS5D18T-6R8 □-B-N	6.8	10KHz,1V	0.100+0	1.35
SCDS5D18T-8R9 □-B-N	8.9	10KHz,1V	0.116+0	1.25
SCDS5D18T-100 □-B-N	10	10KHz,1V	0.124+0	1.2
SCDS5D18T-120 □-B-N	12	10KHz,1V	0.153+0	1.1
SCDS5D18T-150 □-B-N	15	10KHz,1V	0.196+0	0.97
SCDS5D18T-180 □-B-N	18	10KHz,1V	0.210+0	0.85
SCDS5D18T-220 □-B-N	22	10KHz,1V	0.290+0	0.8
SCDS5D18T-270 □-B-N	27	10KHz,1V	0.330+0	0.75
SCDS5D18T-330 □-B-N	33	10KHz,1V	0.386+0	0.65
SCDS5D18T-390 □-B-N	39	10KHz,1V	0.520+0	0.57
SCDS5D18T-470 □-B-N	47	10KHz,1V	0.595+0	0.54
SCDS5D18T-560 □-B-N	56	10KHz,1V	0.665+0	0.5
SCDS5D18T-680 □-B-N	68	10KHz,1V	0.840+0	0.43
SCDS5D18T-820 □-B-N	82	10KHz,1V	0.978+0	0.41
SCDS5D18T-101 □-B-N	100	10KHz,1V	1.200+0	0.36
SCDS5D18T-121 □-B-N	120	10KHz,1V	1.600+0	0.32
SCDS5D18T-151 □-B-N	150	10KHz,1V	1.800+0	0.3

NOTE : □-tolerance T=±30%

1.Operating temperature range -40°C~85°C(Includes temperature when the coil is heated)

2.Rate current: The rate current indicates the current when the inductance decreases to 70% over of it's nominal value or D.C.current when the temperature rising ΔT=40°C lower, whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	Rated current(A)Max
SCDS5D28T-2R5 □ -B-N	2.5	10KHz,1V	0.018+0	2.6
SCDS5D28T-3R0 □ -B-N	3	10KHz,1V	0.024+0	2.4
SCDS5D28T-4R2 □ -B-N	4.2	10KHz,1V	0.031+0	2.2
SCDS5D28T-4R7 □ -B-N	4.7	10KHz,1V	0.038+0	1.9
SCDS5D28T-5R3 □ -B-N	5.3	10KHz,1V	0.038+0	1.9
SCDS5D28T-6R2 □ -B-N	6.2	10KHz,1V	0.045+0	1.8
SCDS5D28T-6R8 □ -B-N	6.8	10KHz,1V	0.050+0	1.65
SCDS5D28T-8R2 □ -B-N	8.2	10KHz,1V	0.053+0	1.6
SCDS5D28T-100 □ -B-N	10	10KHz,1V	0.065+0	1.3
SCDS5D28T-120 □ -B-N	12	10KHz,1V	0.076+0	1.2
SCDS5D28T-150 □ -B-N	15	10KHz,1V	0.103+0	1.1
SCDS5D28T-180 □ -B-N	18	10KHz,1V	0.110+0	1
SCDS5D28T-220 □ -B-N	22	10KHz,1V	0.122+0	0.9
SCDS5D28T-270 □ -B-N	27	10KHz,1V	0.175+0	0.85
SCDS5D28T-330 □ -B-N	33	10KHz,1V	0.189+0	0.75
SCDS5D28T-390 □ -B-N	39	10KHz,1V	0.212+0	0.7
SCDS5D28T-470 □ -B-N	47	10KHz,1V	0.250+0	0.62
SCDS5D28T-560 □ -B-N	56	10KHz,1V	0.305+0	0.58
SCDS5D28T-680 □ -B-N	68	10KHz,1V	0.355+0	0.52
SCDS5D28T-820 □ -B-N	82	10KHz,1V	0.463+0	0.46
SCDS5D28T-101 □ -B-N	100	10KHz,1V	0.520+0	0.42

NOTE : □ -tolerance T=±30%

1.Operating temperature range -40°C~85°C(Includes temperature when the coil is heated)

2.Rate current: The rate current indicates the current when the inductance decreases to 70% over of it's nominal value or D.C.current when the temperature rising ΔT=40°C lower, whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	Rated current(A)Max
SCDS6D28T-3R0 □-B-N	3	10KHz,1V	0.024+0	3
SCDS6D28T-3R9 □-B-N	3.9	10KHz,1V	0.027+0	2.6
SCDS6D28T-4R7 □-B-N	4.7	10KHz,1V	0.031+0	2.4
SCDS6D28T-5R0 □-B-N	5	10KHz,1V	0.031+0	2.4
SCDS6D28T-5R6 □-B-N	5.6	10KHz,1V	0.035+0	2.25
SCDS6D28T-6R0 □-B-N	6	10KHz,1V	0.035+0	2.25
SCDS6D28T-6R8 □-B-N	6.8	10KHz,1V	0.052+0	2.1
SCDS6D28T-7R3 □-B-N	7.3	10KHz,1V	0.054+0	2.1
SCDS6D28T-8R6 □-B-N	8.6	10KHz,1V	0.058+0	1.85
SCDS6D28T-100 □-B-N	10	10KHz,1V	0.065+0	1.7
SCDS6D28T-120 □-B-N	12	10KHz,1V	0.070+0	1.55
SCDS6D28T-150 □-B-N	15	10KHz,1V	0.084+0	1.4
SCDS6D28T-180 □-B-N	18	10KHz,1V	0.095+0	1.32
SCDS6D28T-220 □-B-N	22	10KHz,1V	0.128+0	1.2
SCDS6D28T-270 □-B-N	27	10KHz,1V	0.142+0	1.05
SCDS6D28T-330 □-B-N	33	10KHz,1V	0.165+0	0.97
SCDS6D28T-390 □-B-N	39	10KHz,1V	0.210+0	0.86
SCDS6D28T-470 □-B-N	47	10KHz,1V	0.238+0	0.8
SCDS6D28T-560 □-B-N	56	10KHz,1V	0.277+0	0.73
SCDS6D28T-680 □-B-N	68	10KHz,1V	0.304+0	0.65
SCDS6D28T-820 □-B-N	82	10KHz,1V	0.390+0	0.6
SCDS6D28T-101 □-B-N	100	10KHz,1V	0.535+0	0.54

NOTE : □-tolerance T=±30%

1.Operating temperature range -40°C~85°C(Includes temperature when the coil is heated)

2.Rate current: The rate current indicates the current when the inductance decreases to 70% over of it's nominal value or D.C.current when the temperature rising ΔT=40°C lower, whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)Max	Rated current(A)Max
SCDS6D38T-3R3 □-B-N	3.3	10KHz,0.1V	0.020+0	3.5
SCDS6D38T-4R7 □-B-N	4.7	10KHz,0.1V	0.022+0	3.1
SCDS6D38T-5R0 □-B-N	5	10KHz,0.1V	0.024+0	2.9
SCDS6D38T-6R2 □-B-N	6.2	10KHz,0.1V	0.027+0	2.5
SCDS6D38T-6R8 □-B-N	6.8	10KHz,0.1V	0.029+0	2.4
SCDS6D38T-7R4 □-B-N	7.4	10KHz,0.1V	0.031+0	2.3
SCDS6D38T-8R7 □-B-N	8.7	10KHz,0.1V	0.034+0	2.2
SCDS6D38T-100 □-B-N	10	10KHz,0.1V	0.038+0	2
SCDS6D38T-120 □-B-N	12	10KHz,0.1V	0.053+0	1.7
SCDS6D38T-150 □-B-N	15	10KHz,0.1V	0.057+0	1.6
SCDS6D38T-180 □-B-N	18	10KHz,0.1V	0.092+0	1.5
SCDS6D38T-220 □-B-N	22	10KHz,0.1V	0.096+0	1.3
SCDS6D38T-270 □-B-N	27	10KHz,0.1V	0.109+0	1.2
SCDS6D38T-330 □-B-N	33	10KHz,0.1V	0.124+0	1.1
SCDS6D38T-390 □-B-N	39	10KHz,0.1V	0.138+0	1
SCDS6D38T-470 □-B-N	47	10KHz,0.1V	0.150+0	0.95
SCDS6D38T-560 □-B-N	56	10KHz,0.1V	0.202+0	0.85
SCDS6D38T-680 □-B-N	68	10KHz,0.1V	0.234+0	0.75
SCDS6D38T-820 □-B-N	82	10KHz,0.1V	0.324+0	0.7
SCDS6D38T-101 □-B-N	100	10KHz,0.1V	0.358+0	0.65

NOTE : □-tolerance T=±30%

1.Operating temperature range -40°C~85°C(Includes temperature when the coil is heated)

2.Rate current: The rate current indicates the current when the inductance decreases to 70% over of it's nominal value or D.C.current when the temperature rising ΔT=40°C lower, whichever is lower.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

SCDS SERIES RELIABILITY TEST

1-1 MECHANICAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-1-1	Vibration	Appearance : No Damage L Change : within ±10% Q Change : within ±30% RDC : within Specification	Test device shall be soldered on the substrate. Oscillation Frequency : 10 to 55 to 10Hz for 1Min. Amplitude : 1.5mm Time : 2Hrs. for each Axis (X,Y & Z), Total 6Hrs.
1-1-2	Resistance to Soldering Heat	Appearance : No Damage	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 260 ± 5°C Immersion Time : 10 ± 1Sec.
1-1-3	Solderability	The electrodes shall be at least 90% covered with new solder coating.	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 230 ± 5°C Immersion Time : 4 ± 1Sec.

1-2 ENVIRONMENTAL PERFORMANCE

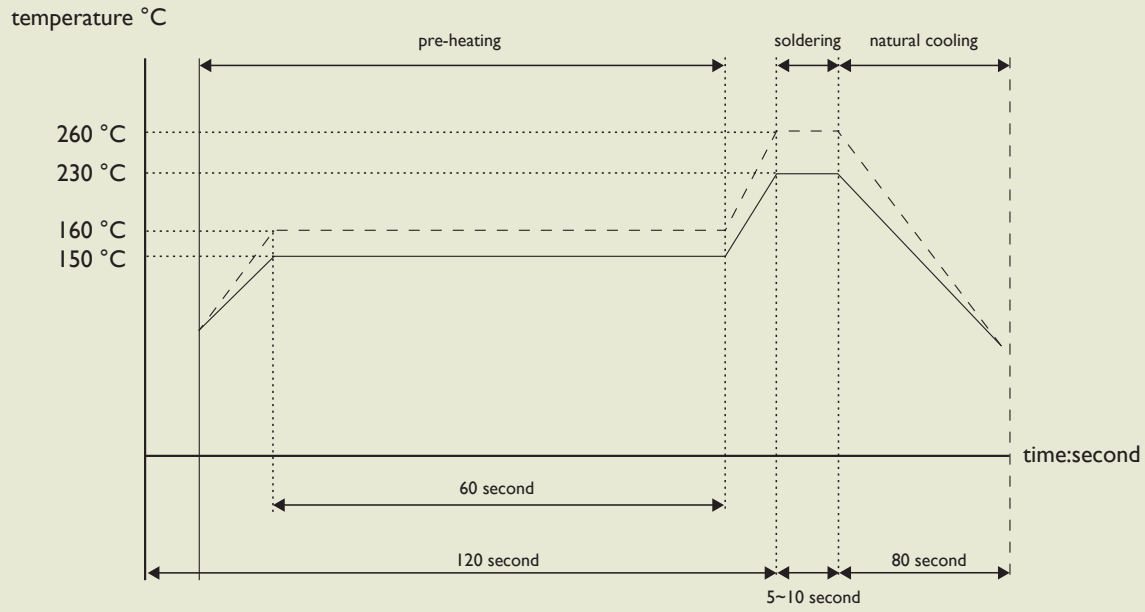
NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-2-1	Temperature Shock	Appearance : No Damage L Change : within ±10% L Change : within ±30% RDC : within Specification	10 Cycles (Air to Air) 1 Cycles shall Consist of : 30Min. Exposure to -55°C 30Min. Exposure to -125°C 15Sec. Max. Transition between Temperatures Measured after Exposure in the Room Condition for 24Hrs.
1-2-2	Temperature Cycle		One Cycle

Step	Temperature (°C)	Time (Min.)
1	-25 ± 3	30
2	25 ± 2	3
3	85 ± 3	30
4	25 ± 2	3

		Total : 100 Cycles Measured after Exposure in the Room Condition for 24Hrs.
1-2-3	Humidity Resistance	Temperature : 40 ± 2°C Relative Humidity : 90 ~ 95% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-4	High Temperature Resistance	Temperature : 85 ± 3°C Relative Humidity : 20% Applied Current : Rated Current Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-5	Low Temperature Resistance	Temperature : -25 ± 3°C Relative Humidity : 0% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



for: lead solder

for: lead-free solder

SMD Shielded Power Inductors

SCDS Series

High Energy Storage & Lower Power Losses

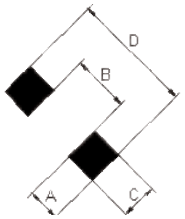
PRODUCT IDENTIFICATION

SCDS □□□□ □□- □□□□ □- □

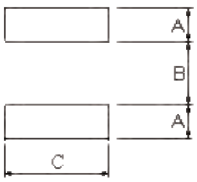
- Intemal No.
- Tolerance
- Inductance
- T or R or LD or HP
- Dimensions
- Product Symbol

- T :Packaging:Tape and Reel
- R:Core style (Round)
- HP:Low DCR
- LD:High Power
- Tolerance:K=±10%, M=±20%, T=±30%
- Internal No.:B:Silver plated terminals(3D12~6D38);S:Base type terminals(2D09~2D18HP&62T~127)
- Note:YAGEO has already released lead-free indutors of SCDS series,and Intemal No. will be added a"N" as identification.

RECOMMENDED PATTERN



A	B	C	D
1.3	1.7	1.3	4.3



A	B	C
4	3.5	11

APPLICATIONS

- Power supply for VTRs.
- OA equipment.
- LCD televisions.
- Notebook PCs.
- Portable communication equipment.
- DC/DC converters,etc.
- Operating temperayure:-30°C ~100°C (For 2D09/ 4D18C); -40°C ~85°C (For 1014R/ 105R)

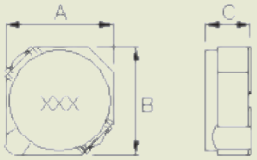
FEATURES

- Available in magnetically shielded
- Low DC resistance
- Suitable for large currents.
- Ideal for a variety of DC-DC converter inductor applications.
- Available on tape and reel for auto surface mounting.

SHAPES AND DIMENSIONS

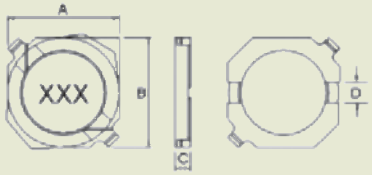
Dimensions : mm

SCDS 2D09



A	B	C	D	E	F
3.2^{+0}	3.2^{+0}	1.0^{+0}	3.3	2.1	1.0

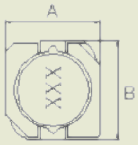
SCDS 1014R

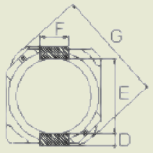


A	B	C	D
10±0.3	10±0.3	1.4±0.3	2.8 TYP

SHAPES AND DIMENSIONS

SCDS 105R

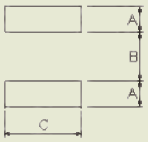




A	B	C	D	E	F	G
10.3^{+0}	10.5^{+0}	5.1^{+0}	1.2	7.7	3.0	13.5^{+0}

RECOMMENDED PATTERN

Dimensions : mm



A	B	C
1.6	7.3	3.2

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq(KHz)	D.C.R(mΩ)Max	Rated Current(A)Max
SCDS2D09T -1R2T-S	1.2	100/1V	97.5	0.80
SCDS2D09T -1R5T-S	1.5	100/1V	110.0	0.73
SCDS2D09T -1R8T-S	1.8	100/1V	131.3	0.65
SCDS2D09T -2R2T-S	2.2	100/1V	143.8	0.60
SCDS2D09T -2R7T-S	2.7	100/1V	150.0	0.53
SCDS2D09T -3R3T-S	3.3	100/1V	193.8	0.47
SCDS2D09T -3R9T-S	3.9	100/1V	225.0	0.45
SCDS2D09T -4R7T-S	4.7	100/1V	287.5	0.41
SCDS2D09T -5R6T-S	5.6	100/1V	325.0	0.37
SCDS2D09T -6R8T-S	6.8	100/1V	425.0	0.33
SCDS2D09T -8R2T-S	8.2	100/1V	475.0	0.30
SCDS2D09T -100T-S	10	100/1V	537.5	0.28

- Inductance range 1.2uH to 10uH
- Tolerance : T=±30%
- Rated current:The rate current indicates the current when the inductance decreases to 65% over of it's nominal value or D.C.current when the temperature rising Δt = 40°C lower, whichever is lower.
- Test instument : L :hp4284A ; RDC : CHEN HWA 502BC ; Rated current : HP4284+42842A or CH1061+CH301A

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq	RDC(Ω)	Rated Current(A)Max	Irms(A)Typ	Tolerance
SCDS2D09T -1R2 □ -N	1.2	100KHz/1V	0.0975+0	0.8	1.24	T
SCDS2D09T -1R5 □ -N	1.5	100KHz/1V	0.1100+0	0.73	1.15	T
SCDS2D09T -1R8 □ -N	1.8	100KHz/1V	0.1313+0	0.65	1.06	T
SCDS2D09T -2R2 □ -N	2.2	100KHz/1V	0.1438+0	0.6	1.05	T
SCDS2D09T -2R7 □ -N	2.7	100KHz/1V	0.1500+0	0.53	0.98	T
SCDS2D09T -3R3 □ -N	3.3	100KHz/1V	0.1938+0	0.47	0.84	T
SCDS2D09T -3R9 □ -N	3.9	100KHz/1V	0.2250+0	0.45	0.72	T
SCDS2D09T -4R7 □ -N	4.7	100KHz/1V	0.2875+0	0.41	0.64	T
SCDS2D09T -5R6 □ -N	5.6	100KHz/1V	0.3250+0	0.37	0.59	T
SCDS2D09T -6R8 □ -N	6.8	100KHz/1V	0.4250+0	0.33	0.53	T
SCDS2D09T -8R2 □ -N	8.2	100KHz/1V	0.4750+0	0.3	0.46	T
SCDS2D09T -100 □ -N	10	100KHz/1V	0.5375+0	0.28	0.42	M,T
SCDS2D09T -220 □ -N	22	100KHz/1V	1.5000+0	0.2	-	M,T

NOTE : □ -tolerance M=±20% / T=±30%

1.Operating temperature range -40°C~85°C(Includes temperature when the coil is heated)

2.Rate current: Inductance drop = 35% typ.

3.Irms:Δt=40°C

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq(KHz)	D.C.R(mΩ)Max	Rated Current(A)Max
SCDS1014R-100M -S	10	100/1V	0.17	1.8
SCDS1014R-150M -S	15	100/1V	0.24	1.4
SCDS1014R-220M -S	22	100/1V	0.33	1.2
SCDS1014R-330M -S	33	100/1V	0.50	0.9

• Inductance range 10uH to 33uH
• Tolerance : M=±20%
• 2.Rate current: Inductance drop = 35% typ.
•Test instument : L :hp192A or HP4263B. RDC : CHEN HWA 502BC Reted current : CH1061+301A

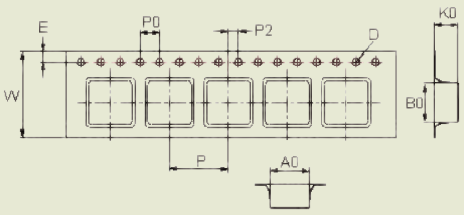
ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq(KHz)	D.C.R(mΩ)Max	Rated Current(A)Max
SCDS105R -R80T-S	0.8	100/1V	4.3	9.50
SCDS105R -1R5T-S	1.5	100/1V	5.8	8.30
SCDS105R -2R2T-S	2.2	100/1V	7.2	7.50
SCDS105R -3R3T-S	3.3	100/1V	10.4	6.50
SCDS105R -4R7T-S	4.7	100/1V	12.3	6.10
SCDS105R -6R8T-S	6.8	100/1V	18	5.40
SCDS105R -8R2T-S	8.2	100/1V	20	5.00
SCDS105R -100T-S	10	100/1V	26	4.50
SCDS105R -120T-S	12	100/1V	33	3.80
SCDS105R -150T-S	15	100/1V	41	3.40
SCDS105R -180T-S	18	100/1V	46	3.10
SCDS105R -220T-S	22	100/1V	61	2.90
SCDS105R -270T-S	27	100/1V	69	2.60
SCDS105R -330T-S	33	100/1V	84	2.50
SCDS105R -390T-S	39	100/1V	106	2.25
SCDS105R -470T-S	47	100/1V	130	2.00
SCDS105R -560T-S	56	100/1V	149	1.90
SCDS105R -680T-S	68	100/1V	201	1.60
SCDS105R -820T-S	82	100/1V	227	1.45
SCDS105R -101T-S	100	100/1V	253	1.35
SCDS105R -121T-S	120	100/1V	303	1.18
SCDS105R -151T-S	150	100/1V	370	1.10
SCDS105R -181T-S	180	100/1V	419	1.00
SCDS105R -221T-S	220	100/1V	500	0.94
SCDS105R -271T-S	270	100/1V	672	0.80
SCDS105R -331T-S	330	100/1V	812	0.73
SCDS105R -391T-S	390	100/1V	953	0.70
SCDS105R -471T-S	470	100/1V	1289	0.54
SCDS105R -561T-S	560	100/1V	1430	0.52
SCDS105R -681T-S	680	100/1V	1599	0.51
SCDS105R -821T-S	820	100/1V	1768	0.48
SCDS105R -102T-S	1000	100/1V	1989	0.42

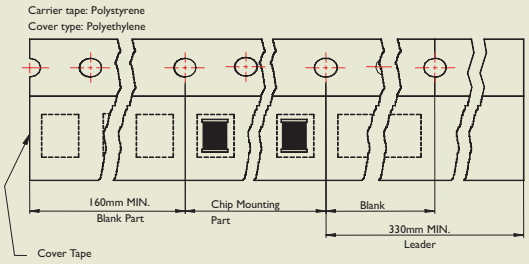
• Inductance range 0.8uH to 10000uH
• Tolerance : T=±30%
• 2.Rate current: Inductance drop = 10% typ.
•Test instument : L :hp192A or HP4263B. ; RDC : CHEN HWA 502BC ; Rated current : HP4284+42842A

PACKAGING SPECIFICATIONS

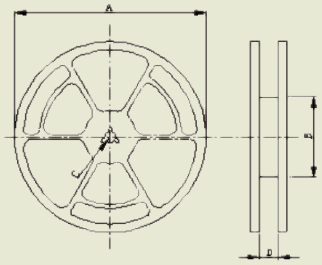
Tape Dimensions



Tape Material



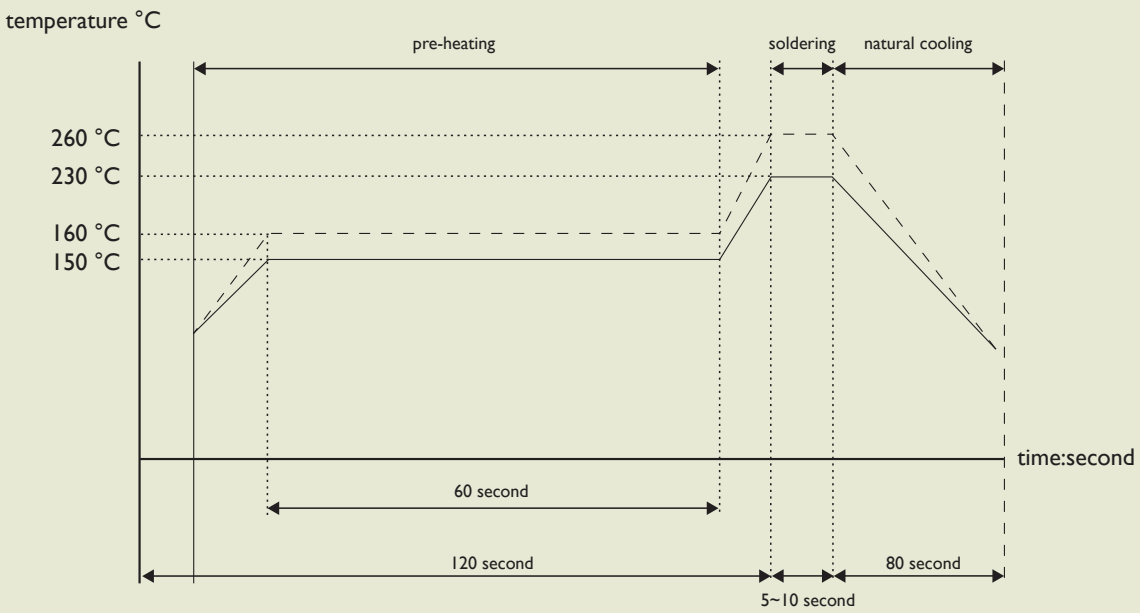
Reel Dimensions

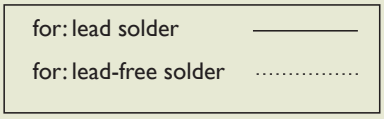


TYPE	TAPE DIMENSIONS									REEL DIMENSIONS				QUANTITY
	A0	B0	K0	D	E	E	P	P0	P2	A	B	C	D	PCS/REEL
SCDS 1014R	10.5	10.5	1.9	1.5	1.75	24	16	4	2	330	100	13	24.4	1000
SCDS 105R	10.5	10.5	5.1	1.5	1.75	24	16	4	2	330	100	13	24.4	500
SCDS 2D09	3.3	3.3	1.3	1.5	1.75	12	8	4	2	178	60	13	13.2	1500

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors





SMD Unshielded Power Inductors

SCMD Series

Low DC Resistance & For Large Current Applications

PRODUCT IDENTIFICATION

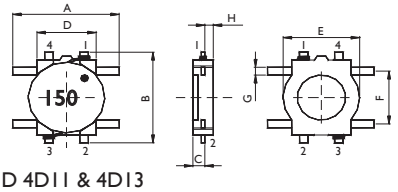
SCMD □□□□ □ -□□□□ -□

- Internal No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

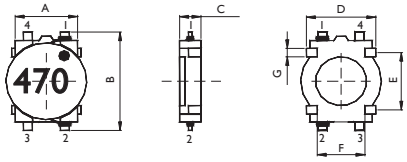
- Packaging: T: Tape and Reel
- Tolerance: M±20%
- Note: YAGEO will start to release SCMD Series inductors with lead-free terminals that meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No. will be changed to "N" as identification. Ex.: SCMD4D06T-2R2 M-N

SHAPES AND DIMENSIONS

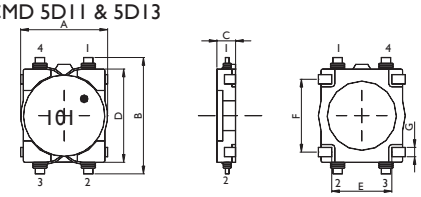
SCMD 4D06 & 4D08



SCMD 4D11 & 4D13



SCMD 5D11 & 5D13



FEATURES

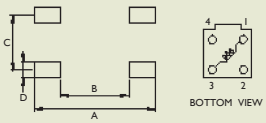
- Available in magnetically shielded.
- Low DC resistance.
- Suitable for large currents.
- Ideal for a variety of DC - Dc converter inductor applications.
- Available on tape and reel for auto surface mounting

APPLICATIONS

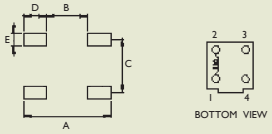
- power supply for VTRs.
- OA equipment.
- LCD televisions.
- Notebook PCs.
- Portable communication equipment.
- DC / DC converters, etc.

RECOMENDED PATTERN

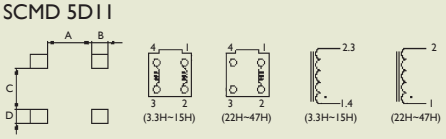
SCMD 4D06 & 4D08



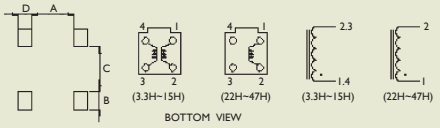
SCMD 4D11 & 4D13



SCMD 5D11



SCMD 5D13



SHAPES AND DIMENSIONS

TYPE	A Max	B Max	C Max	D	E	F	G	H
SCMD4D06	6.3	5.8	0.8	3.5	4.1	3.2	0.5	0.4
SCMD4D08	6.3	5.8	1.0	3.5	4.1	3.2	0.5	0.4
SCMD4D11	4.4	5.8	1.25	3.7	3.2	2.9	0.5	
SCMD4D13	4.4	5.8	1.45	3.7	3.2	2.9	0.5	
SCMD5D11	5.8	7.4	1.2	6.0	4.2	4.5	0.6	
SCMD5D13	5.8	7.4	1.5	6.0	4.2	4.5	0.6	

RECOMENDED PATTERN

TYPE	A	B	C	D	E
SCMD4D06	7	4	3.2	0.9	
SCMD4D08	7	4	3.2	0.9	
SCMD4D11	5.3	2.5	3.2	1.4	0.8
SCMD4D13	5.3	2.5	3.2	1.4	0.8
SCMD5D11	3.6	1.4	3.4	1.1	
SCMD5D13	3.6	1.4	3.6	1.1	

STANDARD SPECIFICATIONS

Stamp	Inductance (μH)	D.C.R(Ω) Max.						Rated D.C. Current(A)					
		SCMD 4D06	SCMD 4D08	SCMD 4D11	SCMD 4D13	SCMD 5D11	SCMD 5D13	SCMD 4D06	SCMD 4D08	SCMD 4D11	SCMD 4D13	SCMD 5D11	SCMD 5D13
2R2	2.2	0.116		0.116				0.95		0.95			
3R3	3.3	0.174	0.160	0.174	0.160	0.109	0.081	0.77	0.85	0.77	0.85	0.94	1.25
4R7	4.7	0.216	0.194	0.216	0.194	0.156	0.106	0.75	0.80	0.75	0.80	0.80	1.20
6R8	6.8	0.296	0.276	0.296	0.276	0.216	0.144	0.62	0.65	0.62	0.65	0.65	0.90
100	10	0.457	0.335	0.457	0.335	0.275	0.187	0.50	0.57	0.50	0.57	0.54	0.85
150	15	0.676	0.508	0.676	0.508	0.438	0.300	0.40	0.45	0.40	0.45	0.40	0.57
220	22	1.066	0.766	1.066	0.766	0.663	0.431	0.30	0.37	0.30	0.37	0.36	0.54
330	33	1.647	1.162	1.647	1.162	0.975	0.637	0.24	0.28	0.24	0.28	0.32	0.28
470	47	2.843	1.658	2.843	1.658	1.38	0.875	0.18	0.22	0.18	0.22	0.26	0.35
680	68		2.534		2.534	1.70			0.18		0.18	0.23	
101	100		3.800		3.800	2.80			0.17		0.17	0.20	
151	150				5.362						0.13		

- Measuring Frequency (L) : 100KHz
- Tolerance of Inductance: ±20%(M)
- Rated D.C Current (SCMD4D06/4D08/4D11/4D13/5D11)

  This indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition or D.C current when at Δt=40°C whichever is lower.
- Rated D.C Current (SCMD5D13)

  This indicates the value of current when the inductance is 65% more than its nominal value and the temperature is rising at Δt=40°C lower at D.C superposition.
- Test Equipment:

  L: HP4192. LF Impedance Analyzer or HP4284A.

  DCR: CHEN HWA 502

  Rared dc Current: HP4284A+HP42841A

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq(KHz)	RDC(mΩ)Max	Rated Current(A)Max
SCMD4D06T-2R2 □-N	2.2	100KHz,1V	0.116	0.95
SCMD4D06T-3R3 □-N	3.3	100KHz,1V	0.174	0.77
SCMD4D06T-4R7 □-N	4.7	100KHz,1V	0.216	0.75
SCMD4D06T-6R8 □-N	6.8	100KHz,1V	0.296	0.62
SCMD4D06T-100 □-N	10	100KHz,1V	0.457	0.5
SCMD4D06T-150 □-N	15	100KHz,1V	0.676	0.4
SCMD4D06T-220 □-N	22	100KHz,1V	1.066	0.3
SCMD4D06T-330 □-N	33	100KHz,1V	1.647	0.24
SCMD4D06T-470 □-N	47	100KHz,1V	2.843	0.18

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq(KHz)	RDC(mΩ)Max	Rated Current(A)Max
SCMD4D08T-3R3 □-N	3.3	100KHz,1V	0.16	0.85
SCMD4D08T-4R7 □-N	4.7	100KHz,1V	0.194	0.8
SCMD4D08T-6R8 □-N	6.8	100KHz,1V	0.276	0.65
SCMD4D08T-100 □-N	10	100KHz,1V	0.335	0.57
SCMD4D08T-150 □-N	15	100KHz,1V	0.508	0.45
SCMD4D08T-220 □-N	22	100KHz,1V	0.766	0.37
SCMD4D08T-330 □-N	33	100KHz,1V	1.162	0.28
SCMD4D08T-470 □-N	47	100KHz,1V	1.658	0.22
SCMD4D08T-680 □-N	68	100KHz,1V	2.534	0.18
SCMD4D08T-101 □-N	100	100KHz,1V	3.8	0.17
SCMD4D11T-2R2 □-N	2.2	100KHz,1V	0.116	0.95
SCMD4D11T-3R3 □-N	3.3	100KHz,1V	0.174	0.77
SCMD4D11T-4R7 □-N	4.7	100KHz,1V	0.216	0.75
SCMD4D11T-6R8 □-N	6.8	100KHz,1V	0.296	0.62
SCMD4D11T-100 □-N	10	100KHz,1V	0.457	0.5
SCMD4D11T-150 □-N	15	100KHz,1V	0.676	0.4
SCMD4D11T-220 □-N	22	100KHz,1V	1.066	0.3
SCMD4D11T-330 □-N	33	100KHz,1V	1.647	0.24
SCMD4D11T-470 □-N	47	100KHz,1V	2.843	0.18
SCMD4D13T-3R3 □-N	3.3	100KHz,1V	0.16	0.85
SCMD4D13T-4R7 □-N	4.7	100KHz,1V	0.194	0.8
SCMD4D13T-6R8 □-N	6.8	100KHz,1V	0.276	0.65
SCMD4D13T-100 □-N	10	100KHz,1V	0.335	0.57
SCMD4D13T-150 □-N	15	100KHz,1V	0.508	0.45
SCMD4D13T-220 □-N	22	100KHz,1V	0.766	0.37
SCMD4D13T-330 □-N	33	100KHz,1V	1.162	0.28
SCMD4D13T-470 □-N	47	100KHz,1V	1.658	0.22
SCMD4D13T-680 □-N	68	100KHz,1V	2.534	0.18
SCMD4D13T-101 □-N	100	100KHz,1V	3.8	0.17
SCMD4D13T-151 □-N	150	100KHz,1V	5.362	0.13
SCMD5D11T-3R3 □-N	3.3	100KHz,1V	0.109	0.94
SCMD5D11T-4R7 □-N	4.7	100KHz,1V	0.156	0.8
SCMD5D11T-6R8 □-N	6.8	100KHz,1V	0.216	0.65
SCMD5D11T-100 □-N	10	100KHz,1V	0.275	0.54
SCMD5D11T-150 □-N	15	100KHz,1V	0.438	0.4
SCMD5D11T-220 □-N	22	100KHz,1V	0.663	0.36
SCMD5D11T-330 □-N	33	100KHz,1V	0.975	0.32
SCMD5D11T-470 □-N	47	100KHz,1V	1.38	0.26
SCMD5D11T-680 □-N	68	100KHz,1V	1.7	0.23
SCMD5D11T-101 □-N	100	100KHz,1V	2.8	0.2
SCMD5D13T-3R3 □-N	3.3	100KHz,1V	0.081	1.25
SCMD5D13T-4R7 □-N	4.7	100KHz,1V	0.106	1.2
SCMD5D13T-6R8 □-N	6.8	100KHz,1V	0.144	0.9
SCMD5D13T-100 □-N	10	100KHz,1V	0.187	0.85
SCMD5D13T-150 □-N	15	100KHz,1V	0.3	0.57
SCMD5D13T-220 □-N	22	100KHz,1V	0.431	0.54
SCMD5D13T-330 □-N	33	100KHz,1V	0.637	0.38
SCMD5D13T-470 □-N	47	100KHz,1V	0.875	0.35

NOTE : □-tolerance M=±20%

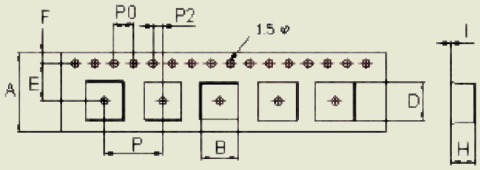
1.Operating temperature range -30°C~100°C

2.Rate current: Inductance drop = 10% typ.

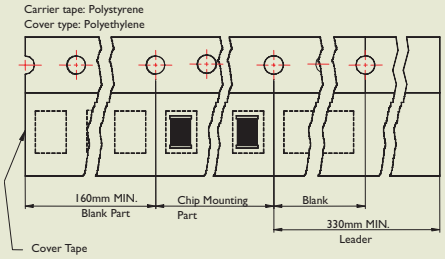
3.This indiscates the value of current when the inductance is 10% lower than it's intial value at D.C superimposition or D.C current when at Δt=40°C whichever is lower

PACKAGING SPECIFICATIONS

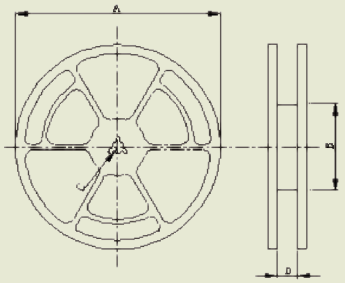
Tape Dimensions



Tape Material



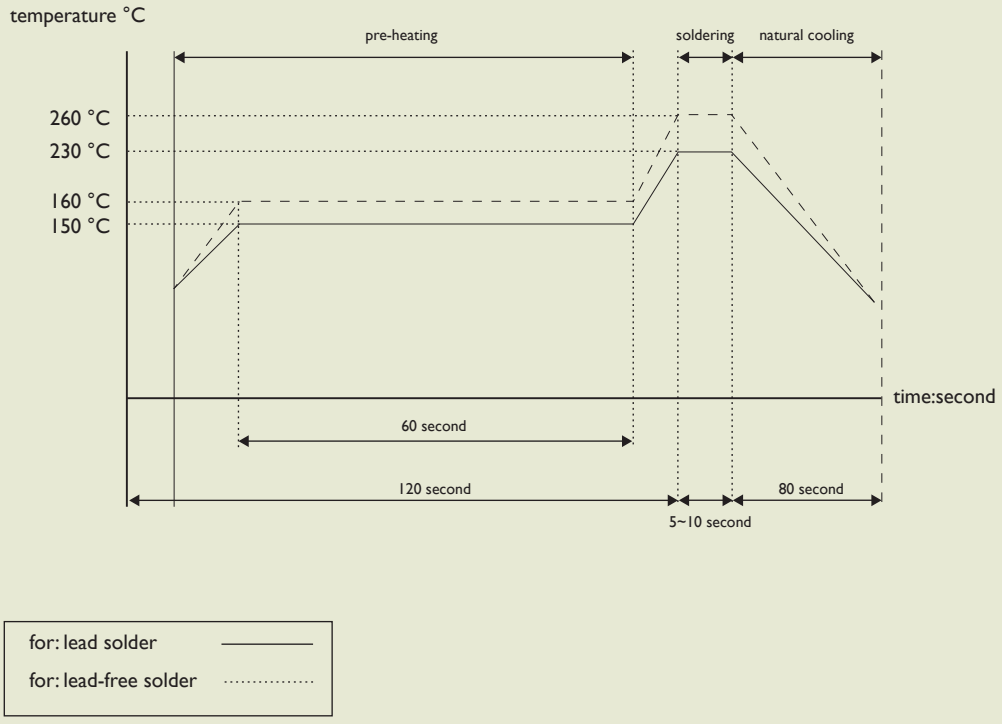
Reel Dimensions



TYPE	TAPE DIMENSIONS										REEL DIMENSIONS				QUANTITY
	A	B	D	E	F	H	I	P	P0	P2	A	B	C	D	PCS/REEL
SCMD4D06	12	6	7	5.5	1.75	1.5	0.4	8	4	2	330	100	13	13.4	1000
SCMD4D08	12	6	7	5.5	1.75	1.7	0.4	8	4	2	330	100	13	13.4	1000
SCMD4D11	12	4.4	5.55	5.5	1.75	1.4	0.3	8	4	2	330	100	13	13.4	1000
SCMD4D13	12	4.4	5.55	5.5	1.75	1.4	0.3	8	4	2	330	100	13	13.4	1000
SCMD5D11	16	5.9	7.5	7.5	1.75	1.5	0.4	8	4	2	330	100	13	13.4	1000
SCMD5D13	16	5.9	7.5	7.5	1.75	1.8	0.4	8	4	2	330	100	13	13.4	1000

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



SMD Power Inductors

SDS0402 Series

FEATURES

Smallest size and high performance

High energy storage and very low resistance.

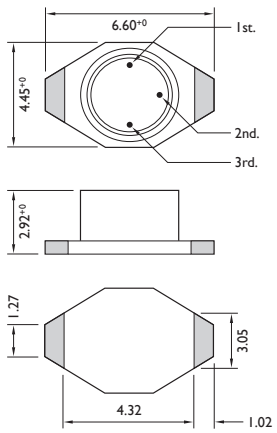
PRODUCT IDENTIFICATION

SDS □□□□ □ -□□□□ -□

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

- Packaging: T: Tape and Reel
- Tolerance: M±20%
- Note: YAGEO will start to release SDS Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO International No. will be changed to "N" as identification. Ex.: SDS0402BL-101M-N.

SHAPE AND DIMENSIONS



Dimensions : mm

These shielded ultra-miniature inductors can help designers achieving significantly longer battery life in handheld communication devices and other portable products.

The SDS0402 Series offers the highest efficiency, smallest size and lowest cost of any comparable part. DC resistance is 10% to 60% lower than other inductors, with greatest efficiency improvements seen at inductance values from 100 to 10,000µH.

These magnetically shielded inductors are designed with a flat top and constructed of heat resistanct materials to ensure trouble-free assembly and reflow operations.

APPLICATIONS

Notebook computers, step-up and step-down converters.

Flash memory programmers, etc...

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (µH ± 20%) *	Q Min.	Q FREQUENCY (KHz)	DC RESISTANCE (Ω+0) Max.	SRF (MHz)	CURRENT (A) Max. **
SDS0402T-1R0M-S	1.0	30	200	0.040	200	3.0
SDS0402T-1R5M-S	1.5	30	200	0.045	100	2.8
SDS0402T-2R2M-S	2.2	40	200	0.050	90	1.8
SDS0402T-3R3M-S	3.3	40	200	0.060	90	1.6
SDS0402T-4R7M-S	4.7	40	200	0.065	80	1.4
SDS0402T-6R8M-S	6.8	40	200	0.070	40	1.2
SDS0402T-100M-S	10	40	200	0.075	30	1.0
SDS0402T-150M-S	15	40	100	0.090	25	0.80
SDS0402T-220M-S	22	40	100	0.110	20	0.70
SDS0402T-330M-S	33	40	100	0.190	15	0.60
SDS0402T-470M-S	47	40	100	0.230	15	0.50
SDS0402T-680M-S	68	40	100	0.290	10	0.40
SDS0402T-101M-S	100	40	100	0.480	8	0.30
SDS0402T-151M-S	150	40	100	0.590	7	0.26
SDS0402T-221M-S	220	40	100	0.770	4	0.22
SDS0402T-331M-S	330	40	100	1.4	4	0.20
SDS0402T-471M-S	470	40	100	1.8	3	0.19
SDS0402T-681M-S	680	40	100	2.2	2	0.18
SDS0402T-102M-S	1000	40	100	3.4	1	0.15
SDS0402T-152M-S	1500	50	100	4.2	1	0.12
SDS0402T-222M-S	2200	50	100	8.5	1	0.10
SDS0402T-332M-S	3300	50	100	11	0.5	0.08
SDS0402T-472M-S	4700	50	100	13.9	0.5	0.06
SDS0402T-682M-S	6800	50	100	25	0.5	0.04
SDS0402T-103M-S	10000	50	100	32.8	0.4	0.02

* Inductance Tested at 0.1 Vrms, 100KHz

** 30°C Temperature Rise

Operating Temperature Range -40°C to +85°C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE at 50MHz (nH)	TEST FREQUENCY (MHZ)	Rdc Max	Irms (A)	Isat (A)	SRF (MHZ) TYP	Q FREQ MIN (KHz)	COLOR CODING 1st	2nd	3rd
SDS0402T-1R0 □ -N	1	100KHz,0.1V	0.04	3	0.25	200	30/200	BRN	BLK	RED
SDS0402T-1R5 □ -N	1.5	100KHz,0.1V	0.045	2.8	0.25	100	30/200	BRN	GRN	RED
SDS0402T-2R2 □ -N	2.2	100KHz,0.1V	0.05	1.8	0.2	90	40/200	RED	RED	RED
SDS0402T-3R3 □ -N	3.3	100KHz,0.1V	0.06	1.6	0.15	90	40/200	ORN	ORN	RED
SDS0402T-4R7 □ -N	4.7	100KHz,0.1V	0.065	1.4	0.12	80	40/200	YEL	VIO	RED
SDS0402T-6R8 □ -N	6.8	100KHz,0.1V	0.07	1.2	0.1	40	40/200	BLU	GRY	RED
SDS0402T-100 □ -N	10	100KHz,0.1V	0.075	1	0.075	30	40/200	BRN	BLK	ORN
SDS0402T-150 □ -N	15	100KHz,0.1V	0.09	0.8	0.06	25	40/100	BRN	GRN	ORN
SDS0402T-220 □ -N	22	100KHz,0.1V	0.11	0.7	0.06	20	40/100	RED	RED	ORN
SDS0402T-330 □ -N	33	100KHz,0.1V	0.19	0.6	0.04	15	40/100	ORN	ORN	ORN
SDS0402T-470 □ -N	47	100KHz,0.1V	0.23	0.5	0.03	15	40/100	YEL	VIO	ORN
SDS0402T-680 □ -N	68	100KHz,0.1V	0.29	0.4	0.025	10	40/100	BLU	GRY	ORN
SDS0402T-101 □ -N	100	100KHz,0.1V	0.48	0.3	0.025	8	40/100	BRN	BLK	YEL
SDS0402T-151 □ -N	150	100KHz,0.1V	0.59	0.26	0.025	7	40/100	BRN	GRN	YEL
SDS0402T-221 □ -N	220	100KHz,0.1V	0.77	0.22	0.015	4	40/100	RED	RED	YEL
SDS0402T-331 □ -N	330	100KHz,0.1V	1.4	0.2	0.015	4	40/100	ORN	ORN	YEL
SDS0402T-471 □ -N	470	100KHz,0.1V	1.8	0.19	0.01	3	40/100	YEL	VIO	YEL
SDS0402T-681 □ -N	680	100KHz,0.1V	2.2	0.18	0.01	2	40/100	BLU	GRY	YEL
SDS0402T-102 □ -N	1000	100KHz,0.1V	3.4	0.15	0.01	1	40/100	BRN	BLK	GRN
SDS0402T-152 □ -N	1500	100KHz,0.1V	4.2	0.12	0.005	1	50/100	BRN	GRN	GRN
SDS0402T-222 □ -N	2200	100KHz,0.1V	8.5	0.1	0.005	1	50/100	RED	RED	GRN
SDS0402T-332 □ -N	3300	100KHz,0.1V	11	0.08	0.005	0.5	50/100	ORN	ORN	GRN
SDS0402T-472 □ -N	4700	100KHz,0.1V	13.9	0.06	0.005	0.5	50/100	YEL	VIO	GRN
SDS0402T-682 □ -N	6800	100KHz,0.1V	25	0.04	0.005	0.5	50/100	BLU	GRY	GRN
SDS0402T-103 □ -N	10000	100KHz,0.1V	32.8	0.02	0.002	0.4	50/100	BRN	BLK	BLU

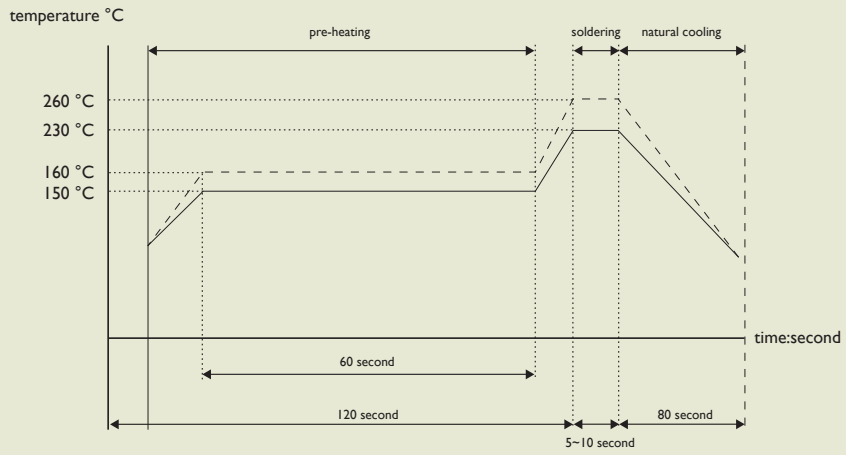
NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

- Operating Temperature Range from -40°C to 85°C
- inductance drop t10% type
- 30°C rise typ at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters, Transformers, Current Sensors



Shielded SMD
Power Inductors

SDS0402BL Series

FEATURES

Smallest size and high performance

High energy storage and very low resistance.

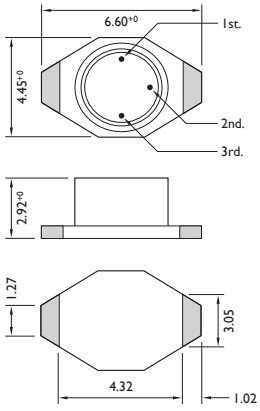
PRODUCT IDENTIFICATION

SDS □□□□□ -□□□□ -□

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

- Packaging: T: Tape and Reel
- Tolerance: M±20%
- Note: YAGEO will start to release SDS Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO International No. will be changed to "N" as identification. Ex.: SDS0402BL-101M-N.

SHAPE AND DIMENSIONS



Dimensions : mm

APPLICATIONS

Notebook computers, step-up and step-down converters.

Flash memory programmers, etc...

These shielded ultra-miniature inductors can help designers achieving significantly longer battery life in handheld communication devices and other portable products.

The SDS0402BL Series offers the highest efficiency, smallest size and lowest cost of any comparable part. DC resistance is 10% to 60% lower than other inductors, with greatest efficiency improvements seen at inductance values from 100 to 10,000µH.

These magnetically shielded inductors are designed with a flat top and constructed of heat resistant materials to ensure trouble-free assembly and reflow operations.

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (mH) *	TOLERANCE (±%)	DC RESISTANCE (Ω+%) Max.	INSULATION CORE-WINDING (MΩ)	SRF (MHz)	CURRENT (mA) Max. **
SDS0402BL-101M-S	0.10	20	0.95	> 10	12	220
SDS0402BL-151M-S	0.15	20	1.4	> 10	10	200
SDS0402BL-221M-S	0.22	20	1.7	> 10	8	180
SDS0402BL-331M-S	0.33	20	2.2	> 10	6	160
SDS0402BL-471M-S	0.47	20	3.8	> 10	5	140
SDS0402BL-681M-S	0.68	20	4.9	> 10	4	120
SDS0402BL-102M-S	1.0	20	9	> 10	2	100
SDS0402BL-152M-S	1.5	20	11	> 10	1	80
SDS0402BL-222M-S	2.2	20	19	> 10	1	50
SDS0402BL-332M-S	3.3	20	24	> 10	1	40
SDS0402BL-472M-S	4.7	20	30	> 10	1	30
SDS0402BL-682M-S	6.8	20	56	> 10	0.9	20
SDS0402BL-103M-S	10.0	20	74	> 10	0.8	10

* Inductance Tested at 0.1 Vrms, 100KHz
** 30°C Temperature Rise
Operating Temperature Range -40°C to +85°C
Electrical Specifications at 25°C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE at 50MHz (nH)	TEST FREQUENCY (MHZ)	Rdc Max	Irms (A)	Isat (A)	SRF (MHZ) TYP	Q FREQ MIN (KHz)	COLOR CODING 1st	2nd	3rd
SDS0402BL-101 □ -N	100	>10	100KHz	12	0.95	220	BRN	BLK	YEL	
SDS0402BL-151 □ -N	150	>10	100KHz	10	1.4	200	BRN	GRN	YEL	
SDS0402BL-221 □ -N	220	>10	100KHz	8	1.7	180	RED	RED	YEL	
SDS0402BL-331 □ -N	330	>10	100KHz	6	2.2	160	ORN	ORN	YEL	
SDS0402BL-471 □ -N	470	>10	100KHz	5	3.8	140	YEL	VIO	YEL	
SDS0402BL-681 □ -N	680	>10	100KHz	4	4.9	120	BLU	GRY	YEL	
SDS0402BL-102 □ -N	1000	>10	100KHz	2	9	100	BRN	BLK	GRN	
SDS0402BL-152 □ -N	1500	>10	100KHz	1	11	80	BRN	GRN	GRN	
SDS0402BL-222 □ -N	2200	>10	100KHz	1	19	50	RED	RED	GRN	
SDS0402BL-332 □ -N	3300	>10	100KHz	1	24	40	ORN	ORN	GRN	
SDS0402BL-472 □ -N	4700	>10	100KHz	1	30	30	YEL	VIO	GRN	
SDS0402BL-682 □ -N	6800	>10	100KHz	0.9	56	20	BLU	GRY	GRN	
SDS0402BL-103 □ -N	10000	>10	100KHz	0.8	74	10	BRN	BLK	BLU	

NOTE : □ -tolerance M=±20%

1.Operating temperature range -40°C~85°C

2.Inductance Test OSC @ 0.1V

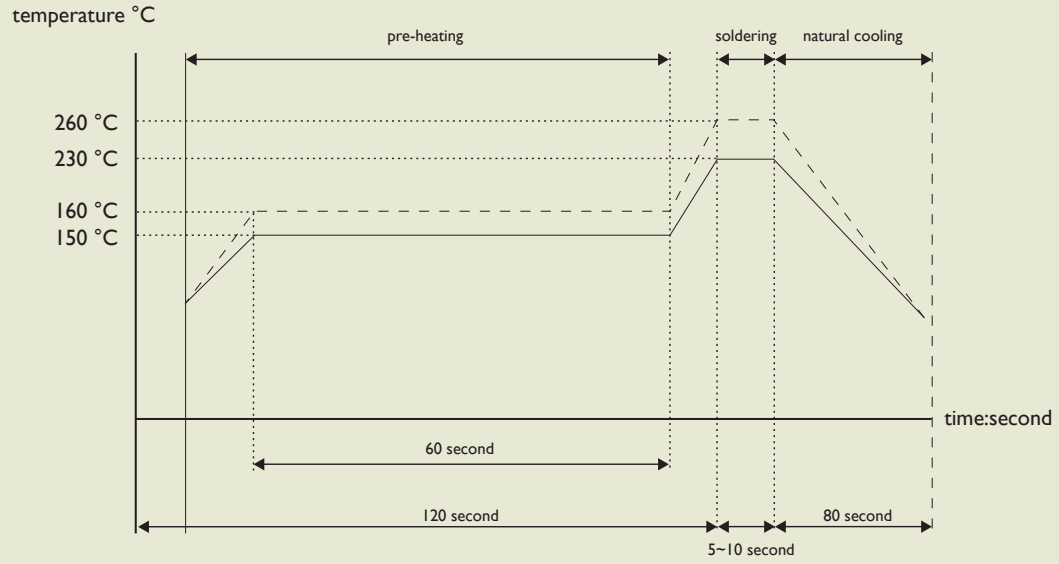
3.Insulation core-winding Test OSC @ 500mV

4. 30°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



for: lead solder ————

for: lead-free solder ·····

SMD Power Inductors

SDS0804 Series

These shielded ultra-miniature inductors can help designers achieving significantly longer battery life in handheld communication devices and other portable products.

These magnetically shielded inductors are designed with a flat top and constructed of heat resistant materials to ensure trouble-free assembly and reflow operations.

FEATURES

Smallest size and high performance

High energy storage and very low resistance.

APPLICATIONS

Notebook computers, step-up and step-down converters.

Flash memory programmers, etc...

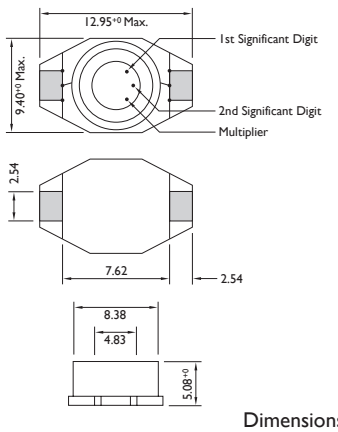
PRODUCT IDENTIFICATION

SDS □□□□ □-□□□□-□

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

- Packaging: T: Tape and Reel
- Tolerance: M±20%
- Note: YAGEO will start to release SDS Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO International No. will be changed to "N" as identification. Ex.: SDS0402BL-101M-N.

SHAPE AND DIMENSIONS



Dimensions : mm

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (µH ± 20%) *	DC RESISTANCE (Ω) Max.	Isat ** (A) Min.	Irms *** (A)	SRF (MHz)
SDS0804T-1R0M-S	1.0	0.021	5.6	5.0	110
SDS0804T-1R5M-S	1.5	0.022	5.2	4.5	90
SDS0804T-2R2M-S	2.2	0.032	5.0	3.8	60
SDS0804T-3R3M-S	3.3	0.039	3.9	3.3	55
SDS0804T-4R7M-S	4.7	0.054	3.2	2.7	30
SDS0804T-6R8M-S	6.8	0.075	2.8	2.2	30
SDS0804T-100M-S	10	0.101	2.4	2.0	28
SDS0804T-150M-S	15	0.150	2.0	1.5	20
SDS0804T-220M-S	22	0.207	1.6	1.3	15
SDS0804T-330M-S	33	0.334	1.4	1.1	12
SDS0804T-470M-S	47	0.472	1.0	0.8	10

* Inductance Tested at 0.1 Vrms, 100KHz

** Inductance Drop = 10% Typ. at Rated Isat.

*** 40° Rise Typ. at Irms.

Operating Temperature Range -40°C to +85°C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE at 50MHz (nH)	TEST FREQUENCY (MHZ)	Rdc Max	Irms (A)	Isat (A)	SRF (MHZ) TYP	Q FREQ MIN (KHz)
SDS0804T-1R0 □-N	1	100KHZ,0.1V	0.021	5	5.6	110	3/100
SDS0804T-1R5 □-N	1.5	100KHZ,0.1V	0.022	4.5	5.2	90	5/100
SDS0804T-2R2 □-N	2.2	100KHZ,0.1V	0.032	3.8	5	60	5/100
SDS0804T-3R3 □-N	3.3	100KHZ,0.1V	0.039	3.3	3.9	55	5/100
SDS0804T-4R7 □-N	4.7	100KHZ,0.1V	0.054	2.7	3.2	30	10/100
SDS0804T-6R8 □-N	6.8	100KHZ,0.1V	0.075	2.2	2.8	30	10/100
SDS0804T-100 □-N	10	100KHZ,0.1V	0.101	2	2.4	28	10/100
SDS0804T-150 □-N	15	100KHZ,0.1V	0.15	1.5	2	20	15/100
SDS0804T-220 □-N	22	100KHZ,0.1V	0.207	1.3	1.6	15	20/100
SDS0804T-330 □-N	33	100KHZ,0.1V	0.334	1.1	1.4	12	20/100
SDS0804T-470 □-N	47	100KHZ,0.1V	0.472	0.8	1	10	20/100
SDS0804T-680 □-N	68	100KHZ,0.1V	0.66	0.7	0.9	10	-
SDS0804T-101 □-N	100	100KHZ,0.1V	1.11	0.6	0.8	7	-
SDS0804T-150 □-N	150	100KHZ,0.1V	1.55	0.5	0.6	6	-
SDS0804T-221 □-N	220	100KHZ,0.1V	2	0.37	0.5	5	-
SDS0804T-102 □-N	1000	100KHZ,0.1V	8.3	0.17	0.32	2	-

NOTE : □-tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

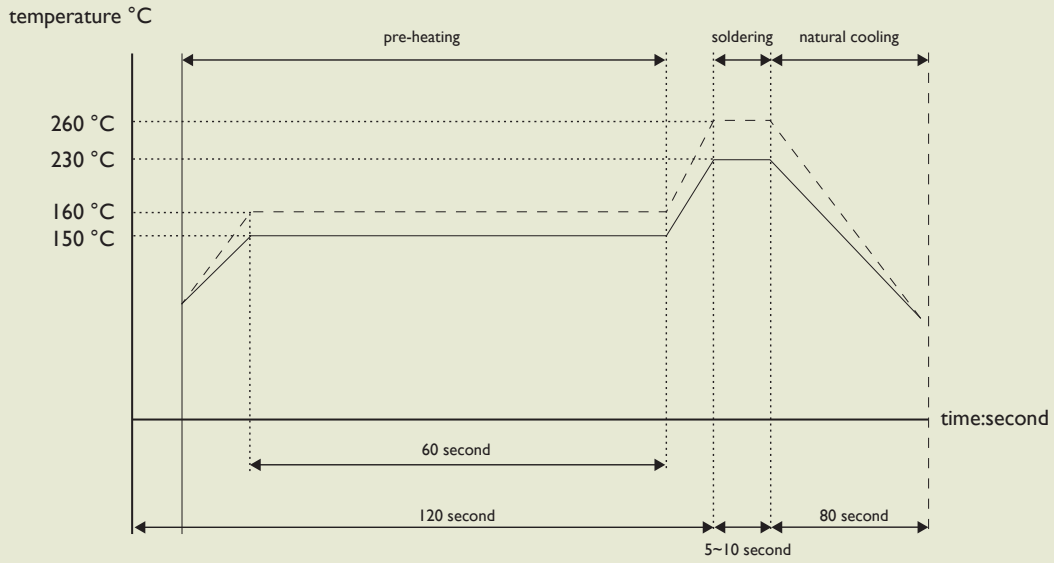
2.Inductance drop 10% typ. at last

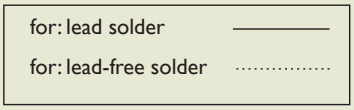
4. 40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors





SMD Power Inductors

SDS1306 Series

FEATURES

Smallest size and high performance

High energy storage and very low resistance.

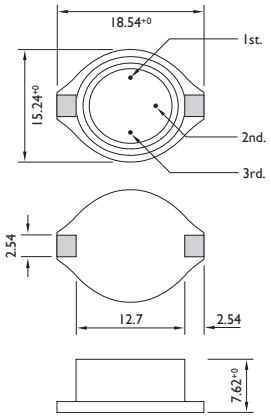
PRODUCT IDENTIFICATION

SDS □□□□ □ -□□□ □ -□

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

- Packaging: T: Tape and Reel
- Tolerance: M±20%
- Note: YAGEO will start to release SDS Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO International No. will be changed to "N" as identification. Ex.: SDS0402BL-101M-N.

SHAPE AND DIMENSIONS



Dimensions : mm

APPLICATIONS

Notebook computers, step-up and step-down converters.

Flash memory programmers, etc...

The SDS1306 Series is a family of magnetically shielded power inductors designed for the higher current requirements of portable computers, Video recorders and other DC-DC conversion applications.

They feature saturation current ratings as high 9 Amps and rms current ratings up to 3.9 Amps. Low DC resistance (as low as .040 Ohms) keeps power losses to a minimum.

Designed specifically for surface mounting, the SDS1306 has a flat top for reliable pick and place operations. The terminals wrap around the end of the base to ensure a sound solder fillet and simplify inspection.

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (µH ± 20%) *	DC RESISTANCE (Ω) Max.	Isat ** (A)	Irms *** (A)	SRF MHz ** (Ref.) Max.
SDS1306T-100M-S	10	0.040	5.5	3.9	24
SDS1306T-150M-S	15	0.048	4.5	3.4	16
SDS1306T-220M-S	22	0.059	3.5	3.1	14
SDS1306T-330M-S	33	0.075	3.3	2.8	11
SDS1306T-470M-S	47	0.097	2.7	2.4	8.0
SDS1306T-680M-S	68	0.138	2.2	2.0	7.0
SDS1306T-101M-S	100	0.207	1.7	1.7	5.5
SDS1306T-151M-S	150	0.293	1.3	1.3	4.8
SDS1306T-221M-S	220	0.470	1.1	1.1	4.0
SDS1306T-331M-S	330	0.780	0.86	0.86	3.0
SDS1306T-471M-S	470	1.08	0.73	0.73	2.4
SDS1306T-681M-S	680	1.40	0.64	0.64	2.0
SDS1306T-102M-S	1000	2.01	0.53	0.53	1.0

* Inductance Tested at 0.1 Vrms, 100KHz

** Inductance Drop 10% Typ. at Isat.

*** 40°C Rise Typ. at Irms.

Operating Temperature Range -40°C to +85°C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE at 50MHz (nH)	TEST FREQUENCY (MHZ)	Rdc Max	Irms (A)	Isat (A)	SRF (MHZ) TYP	Q FREQ MIN (KHz)
SDS1306T-100 □ -N	10	100KHZ,0.1V	0.04	3.9	5.5	24	40/100
SDS1306T-150 □ -N	15	100KHZ,0.1V	0.048	3.4	4.5	16	40/100
SDS1306T-220 □ -N	22	100KHZ,0.1V	0.059	3.1	3.5	14	30/100
SDS1306T-330 □ -N	33	100KHZ,0.1V	0.075	2.8	3.3	11	40/100
SDS1306T-470 □ -N	47	100KHZ,0.1V	0.097	2.4	2.7	8	40/100
SDS1306T-680 □ -N	68	100KHZ,0.1V	0.14	2	2.2	7	40/100
SDS1306T-101 □ -N	100	100KHZ,0.1V	0.21	1.7	1.7	5.5	40/100
SDS1306T-151 □ -N	150	100KHZ,0.1V	0.3	1.3	1.3	4.8	50/100
SDS1306T-221 □ -N	220	100KHZ,0.1V	0.47	1.1	1.1	4	50/100
SDS1306T-331 □ -N	330	100KHZ,0.1V	0.78	0.86	0.86	3	50/100
SDS1306T-471 □ -N	470	100KHZ,0.1V	1.08	0.73	0.73	2.4	50/100
SDS1306T-681 □ -N	680	100KHZ,0.1V	1.4	0.64	0.64	2	60/100
SDS1306T-102 □ -N	1000	100KHZ,0.1V	2.01	0.53	0.53	1	60/100

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

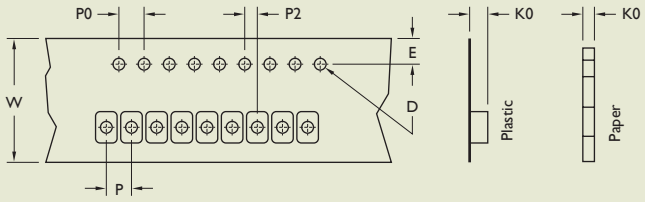
1.Operating temperature range -40°C~85°C

2.Inductance drop 10% typ. at last

4. 40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

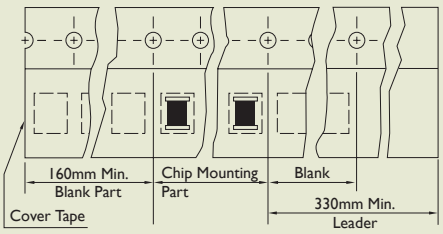
TAPE DIMENSIONS



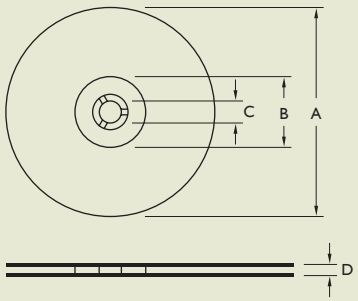
TAPE MATERIAL

Camer Tape : Polystyrene

Cover Type : Polyethylene

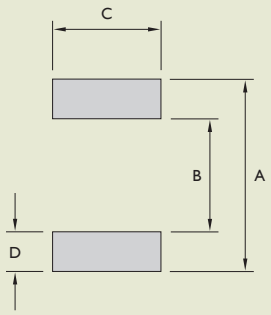


REEL DIMENSIONS



RECOMMENDED PATTERN

Land Pattern



Dimensions : mm

TYPE	TAPE DIMENSIONS							RECOMMENDED PATTERN				REEL DIMENSIONS				QUANTITY (PCS/REEL)	
	K0	D	E	W	P	P0	P2	A	B	C	D	A	B	C	D	178	330
SDS0402BL	3.2	1.55	1.75	12	8	4	2	6.86	4.06	3.56	1.40	330	100	13	13.4	-	2500
												178	60	13	13.2	750	-
SDS0402T	3.2	1.55	1.75	12	8	4	2	6.86	4.06	3.56	1.40	330	100	13	13.4	-	2500
												178	60	13	13.2	750	-
SDS0804T	5.4	1.55	1.75	24	12	4	2	13.21	7.37	2.79	2.92	330	100	13	24.4	-	1000
SDS1306T	7.5	1.55	1.75	32	20	4	2	18.29	12.45	2.79	2.92	330	100	13	33.4	-	250

SDS SERIES RELIABILITY TEST

1-1 MECHANICAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-1-1	Vibration	Appearance : No Damage L Change : within ±10% Q Change : within ±30% RDC : within Specification	Test device shall be soldered on the substrate. Oscillation Frequency : 10 to 55 to 10Hz for 1Min. Amplitude : 1.5mm Time : 2Hrs. for each Axis (X,Y & Z), Total 6Hrs.
1-1-2	Resistance to Soldering Heat	Appearance : No Damage	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 260 ± 5°C Immersion Time : 10 ± 1Sec.
1-1-3	Solderability	The electrodes shall be at least 90% covered with new solder coating.	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 230 ± 5°C Immersion Time : 4 ± 1Sec.

1-2 ENVIRONMENTAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-2-1	Temperature Shock	Appearance : No Damage L Change : within ±10% L Change : within ±30% RDC : within Specification	10 Cycles (Air to Air) 1 Cycles shall Consist of : 30Min. Exposure to -55°C 30Min. Exposure to -125°C 15Sec. Max. Transition between Temperatures Measured after Exposure in the Room Condition for 24Hrs.
1-2-2	Temperature Cycle		One Cycle

Step	Temperature (°C)	Time (Min.)
1	-25 ± 3	30
2	25 ± 2	3
3	85 ± 3	30
4	25 ± 2	3

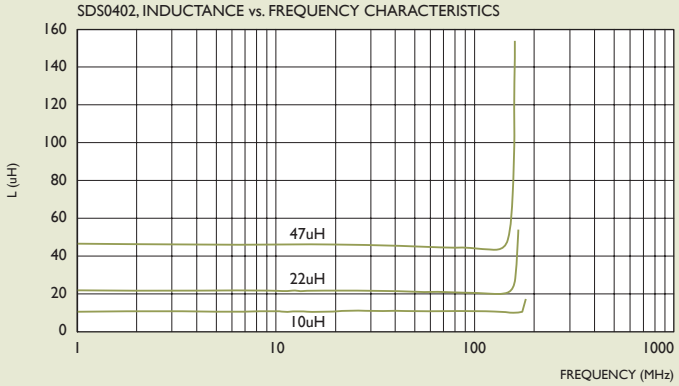
1-2-2	Temperature Cycle	Total : 100 Cycles Measured after Exposure in the Room Condition for 24Hrs.
1-2-3	Humidity Resistance	Temperature : 40 ± 2°C Relative Humidity : 90 ~ 95% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-4	High Temperature Resistance	Temperature : 85 ± 3°C Relative Humidity : 20% Applied Current : Rated Current Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-5	Low Temperature Resistance	Temperature : -25 ± 3°C Relative Humidity : 0% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.

TYPICAL ELECTRICAL CHARACTERISTICS

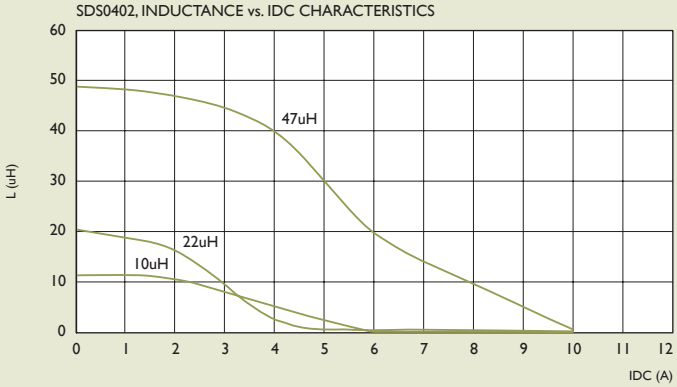
Curves of SCD Series

Test Instruments : HP4291A Impedance / Material Analyzer

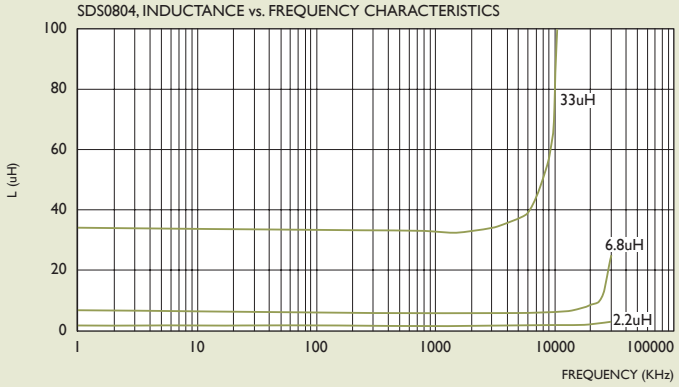
SDS0402, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



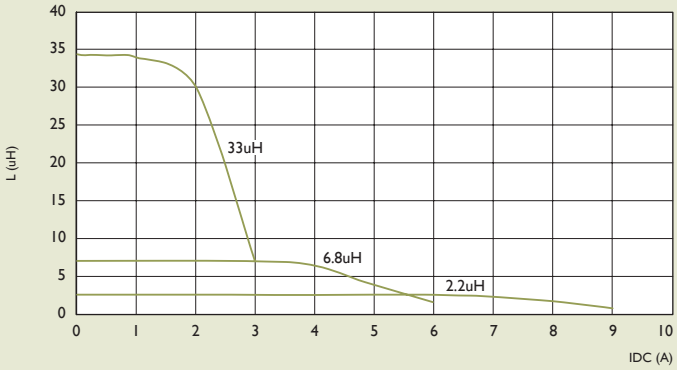
SDS0402, INDUCTANCE vs. IDC CHARACTERISTICS



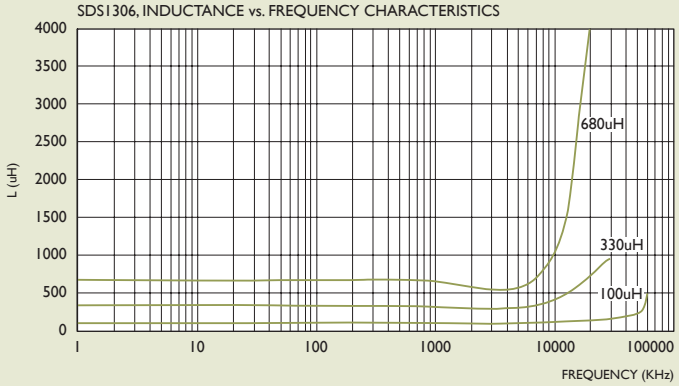
SDS0804, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



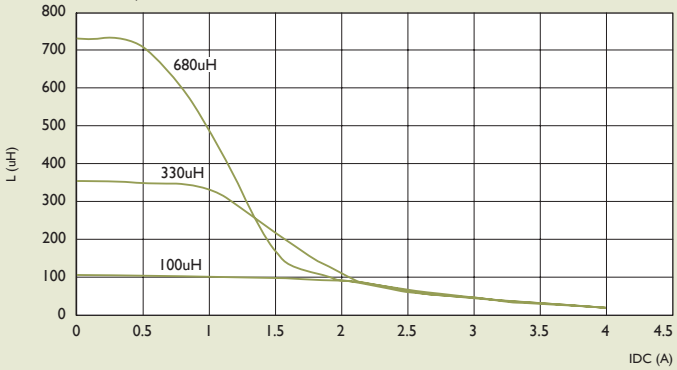
SDS0804, INDUCTANCE vs. IDC CHARACTERISTICS



SDS1306, INDUCTANCE vs. FREQUENCY CHARACTERISTICS

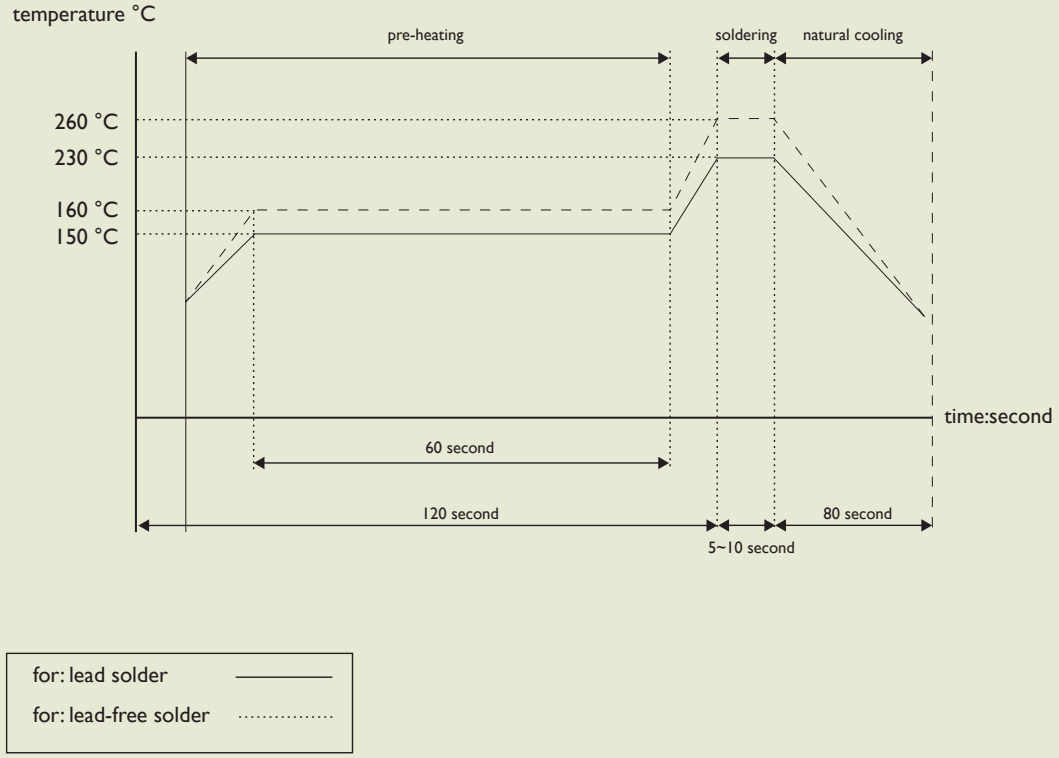


SDS1306, INDUCTANCE vs. IDC CHARACTERISTICS



RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



SMD Power Inductors

SLF Series

FEATURES

- Low resistance and high currents

Designed for low - profile type with low Rdc and large current.

The magnetic shielded type is suitable for high density mounting.

Flat bottom surface allows for reliable mounting onto the board.

Soldering conditions can be easily confirmed when mounting onto the board.

Provide with embossed carrier type packaging for automatic mounting machine.

PRODUCT IDENTIFICATION

SLF □ □□□ □ - □□□□ - □

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

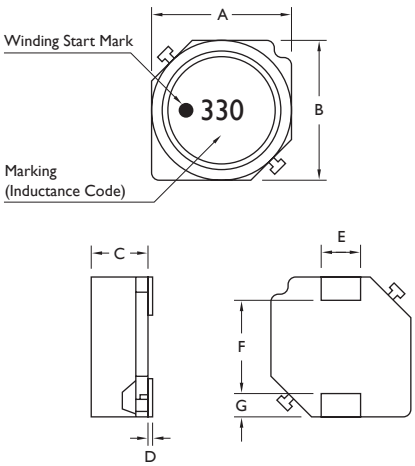
APPLICATIONS

Portable telephones, computers, hard disk divers and

Other electronic equipment.

- Packaging: T : Tape and Reel
- Tolerance: M: ±20%
- Note: YAGEO will start to release SLF Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to "N" as identification. Ex. SLF0628T-4R7M-N

SHAPES AND DIMENSIONS



Dimensions : mm

TYPE	A	B	C	D	E	F	G	WEIGHT
SLF0628	6 ± 0.2	6 ± 0.2	2.8 ± 0.2	0.05typ	2 typ	4.0 typ	0.9 typ	
SLF0728	7 ± 0.2	7 ± 0.2	2.8 ± 0.2	0.1typ	2 typ	4.9 typ	0.9 typ	
SLF0730	7 ± 0.2	7 ± 0.2	3.0 ± 0.2	0.1typ	2 typ	4.9 typ	0.9 typ	
SLF0732	7 ± 0.2	7 ± 0.2	3.2 ± 0.2	0.1typ	2 typ	4.9 typ	0.9 typ	
SLF0745	7 ± 0.2	7 ± 0.2	4.5 ± 0.3	0.1typ	2 typ	4.9 typ	0.9 typ	
SLF1045	10.1 ± 0.3	10.1±0.3	4.5 ± 0.3	0.15typ	3 typ	6 typ	2 typ	
SLF1255	12.5± 0.3	12.5±0.3	5.5 ± 0.3	0.1typ	3 typ	8.6 typ	2 typ	
SLF1265	12.5± 0.3	12.5±0.3	6.5±0.35	0.1typ	3 typ	8.6 typ	2 typ	
SLF1275	12.5± 0.3	12.5±0.3	7.5±0.35	0.1typ	3 typ	8.6 typ	2 typ	

ELECTRICAL CHARACTERISTICS SLF0628 SERIES

PART NO.	INDUCTANCE (μH)	TOLERANCE (±%)	TEST FREQUENCY L(KHz)	DC RESISTANCE (Ω) ± 20%	RATED CURRENT (A) Max.	ITEMP (A) Max.
SLF0628T-4R7M-S	4.7	20	1	0.0284	1.6	2.5
SLF0628T-6R8M-S	6.8	20	1	0.0354	1.5	2.2
SLF0628T-100M-S	10	20	1	0.0532	1.3	1.8
SLF0628T-150M-S	15	20	1	0.0745	1.0	1.4
SLF0628T-220M-S	22	20	1	0.104	0.77	1.3
SLF0628T-330M-S	33	20	1	0.148	0.69	1.1
SLF0628T-470M-S	47	20	1	0.21	0.59	0.92
SLF0628T-680M-S	68	20	1	0.29	0.50	0.78
SLF0628T-101M-S	100	20	1	0.43	0.42	0.64

IDC Current : Value obtained when DC current flows and the initial value of inductance has fallen by 30%.

Itemp Current : Value obtained when current flows and the temperature has risen to 25°C.

Test Equipment Inductance : HP4192A LF Impedance Analyzer or Equivalent (Test Frequency : 1KHz/0.5V)

RDC : SC-7401 Digital Multimeter ,or Equivalent

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (μH)	TEST Frequency	RDC (Ω) ± 20%	IDC (A)Max	ITEMP (A) Max.
SLF0628T-4R7 □-N	4.7	0.5V 1KHZ	0.0284	1.6	2.5
SLF0628T-6R8 □-N	6.8	0.5V 1KHZ	0.0354	1.5	2.2
SLF0628T-100 □-N	10	0.5V 1KHZ	0.0532	1.3	1.8
SLF0628T-150 □-N	15	0.5V 1KHZ	0.0745	1	1.4
SLF0628T-220 □ -N	22	0.5V 1KHZ	0.104	0.77	1.3
SLF0628T-330 □ -N	33	0.5V 1KHZ	0.148	0.69	1.1
SLF0628T-470 □ -N	47	0.5V 1KHZ	0.21	0.59	0.92
SLF0628T-680 □ -N	68	0.5V 1KHZ	0.29	0.5	0.78
SLF0628T-101 □ -N	100	0.5V 1KHZ	0.43	0.42	0.64

NOTE : □ -tolerance M=±20%

1.IDC Current : Value obtained when DC current flows and the initial value of inductance has fallen by 30%.

2.Itemp Current : Value obtained when current flows and the temperature has risen to 25°C.

3.40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS SLF0728 SERIES

PART NO.	INDUCTANCE (μH)	TOLERANCE (±%)	TEST FREQUENCY L(KHz)	DC RESISTANCE (Ω) ± 20%	RATED CURRENT (A) Max.
SLF0728T-3R3M-S	3.3	20	1	0.037	1.6
SLF0728T-4R7M-S	4.7	20	1	0.045	1.5
SLF0728T-6R8M-S	6.8	20	1	0.059	1.3
SLF0728T-100M-S	10	20	1	0.083	1.1
SLF0728T-150M-S	15	20	1	0.13	0.88
SLF0728T-220M-S	22	20	1	0.18	0.75
SLF0728T-330M-S	33	20	1	0.24	0.65
SLF0728T-470M-S	47	20	1	0.34	0.54

IDC current : Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Test Equipment Inductance : HP4192A LF Impedance Analyzer or Equivalent (Test Frequency : 1KHz/0.5V)

RDC : SC-7401 Digital Multimeter ,or Equivalent

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (μH)	TEST Frequency	RDC (Ω) ± 20%	RATED CURRENT (A)Max
SLF0728T-3R3 □ -N	3.3	0.5V 1KHZ	0.037	1.60
SLF0728T-4R7 □ -N	4.7	0.5V 1KHZ	0.045	1.50
SLF0728T-6R8 □ -N	6.8	0.5V 1KHZ	0.059	1.30
SLF0728T-100 □ -N	10	0.5V 1KHZ	0.083	1.10
SLF0728T-150 □ -N	15	0.5V 1KHZ	0.130	0.88
SLF0728T-220 □ -N	22	0.5V 1KHZ	0.180	0.75
SLF0728T-330 □ -N	33	0.5V 1KHZ	0.240	0.65
SLF0728T-470 □ -N	47	0.5V 1KHZ	0.340	0.54

NOTE : □ -tolerance M=±20%

1.IDC Current : Value obtained when DC current flows and the initial value of inductance has fallen by 30%.

2.Itemp Current : Value obtained when current flows and the temperature has risen to 25°C.

3.40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS SLF0730 SERIES

PART NO.	INDUCTANCE (μH)	TOLERANCE (±%)	TEST FREQUENCY L(KHz)	DC RESISTANCE (Ω) ± 20%	RATED CURRENT (A) Max.
SLF0730T-3R3M-S	3.3	20	1	0.023	1.8
SLF0730T-4R7M-S	4.7	20	1	0.036	1.6
SLF0730T-6R8M-S	6.8	20	1	0.041	1.5
SLF0730T-100M-S	10	20	1	0.053	1.3
SLF0730T-150M-S	15	20	1	0.084	1
SLF0730T-220M-S	22	20	1	0.11	0.86
SLF0730T-330M-S	33	20	1	0.16	0.65
SLF0730T-470M-S	47	20	1	0.24	0.57
SLF0730T-680M-S	68	20	1	0.31	0.49
SLF0730T-101M-S	100	20	1	0.45	0.35

IDC Current : Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Test Equipment Inductance : HP4192A LF Impedance Analyzer or Equivalent (Test Frequency : 1KHz/0.5V)

RDC : SC-7401 Digital Multimeter ,or Equivalent

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (μH)	TEST Frequency	RDC (Ω) ± 20%	RATED CURRENT (A)Max
SLF0730T-3R3 □ -N	3.3	0.5V 1KHZ	0.023	1.8
SLF0730T-4R7 □ -N	4.7	0.5V 1KHZ	0.036	1.6
SLF0730T-6R8 □ -N	6.8	0.5V 1KHZ	0.041	1.5
SLF0730T-100 □ -N	10	0.5V 1KHZ	0.053	1.3
SLF0730T-150 □ -N	15	0.5V 1KHZ	0.084	1.0
SLF0730T-220 □ -N	22	0.5V 1KHZ	0.11	0.86
SLF0730T-330 □ -N	33	0.5V 1KHZ	0.16	0.65
SLF0730T-470 □ -N	47	0.5V 1KHZ	0.24	0.57
SLF0730T-680 □ -N	68	0.5V 1KHZ	0.31	0.49
SLF0730T-101 □ -N	100	0.5V 1KHZ	0.45	0.35

NOTE : □ -tolerance M=±20%

1.IDC Current : Value obtained when DC current flows and the initial value of inductance has fallen by 30%.

2.Itemp Current : Value obtained when current flows and the temperature has risen to 25°C.

3.40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS SLF0732 SERIES

PART NO.	INDUCTANCE (μH)	TOLERANCE (±%)	TEST FREQUENCY L(KHz)	DC RESISTANCE (Ω) ± 20%	RATED CURRENT (A) Max.
SLF0732T-3R3M-S	3.3	20	1	0.023	1.9
SLF0732T-4R7M-S	4.7	20	1	0.036	1.7
SLF0732T-6R8M-S	6.8	20	1	0.041	1.6
SLF0732T-100M-S	10	20	1	0.053	1.4
SLF0732T-150M-S	15	20	1	0.075	1.1
SLF0732T-220M-S	22	20	1	0.11	0.96
SLF0732T-330M-S	33	20	1	0.16	0.75
SLF0732T-470M-S	47	20	1	0.24	0.67
SLF0732T-680M-S	68	20	1	0.31	0.59
SLF0732T-101M-S	100	20	1	0.45	0.45
SLF0732T-151M-S	150	20	1	0.65	0.37
SLF0732T-221M-S	220	20	1	1.05	0.29
SLF0732T-331M-S	330	20	1	1.67	0.22
SLF0732T-471M-S	470	20	1	2.05	0.2
SLF0732T-681M-S	680	20	1	3.15	0.16
SLF0732T-102M-S	1000	20	1	4.78	0.13

IDC current : Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Test Equipment Inductance : HP4192A LF Impedance Analyzer or Equivalent (Test Frequency : 1KHz/0.5V)

RDC : SC-7401 Digital Multimeter ,or Equivalent

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (μH)	TEST Frequency	RDC (Ω) ± 20%	RATED CURRENT (A)Max
SLF0732T-2R2 □ -N	2.2	0.5V 1KHZ	0.018	2.1
SLF0732T-3R3 □ -N	3.3	0.5V 1KHZ	0.023	1.9
SLF0732T-4R7 □ -N	4.7	0.5V 1KHZ	0.036	1.7
SLF0732T-6R8 □ -N	6.8	0.5V 1KHZ	0.041	1.6
SLF0732T-100 □ -N	10	0.5V 1KHZ	0.053	1.4
SLF0732T-150 □ -N	15	0.5V 1KHZ	0.075	1.1
SLF0732T-220 □ -N	22	0.5V 1KHZ	0.11	0.96
SLF0732T-330 □ -N	33	0.5V 1KHZ	0.16	0.75
SLF0732T-470 □ -N	47	0.5V 1KHZ	0.24	0.67
SLF0732T-680 □ -N	68	0.5V 1KHZ	0.31	0.59
SLF0732T-101 □ -N	100	0.5V 1KHZ	0.45	0.45
SLF0732T-151 □ -N	150	0.5V 1KHZ	0.65	0.37
SLF0732T-221 □ -N	220	0.5V 1KHZ	1.05	0.29
SLF0732T-331 □ -N	330	0.5V 1KHZ	1.67	0.22
SLF0732T-471 □ -N	470	0.5V 1KHZ	2.05	0.2
SLF0732T-681 □ -N	680	0.5V 1KHZ	3.15	0.16
SLF0732T-102 □ -N	1000	0.5V 1KHZ	4.78	0.13

NOTE : □ -tolerance M=±20%

1.IDC Current : Value obtained when DC current flows and the initial value of inductance has fallen by 30%.

2.Itemp Current : Value obtained when current flows and the temperature has risen to 25°C.

3.40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREETYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS SLF0745 SERIES

PART NO.	INDUCTANCE (μH)	TOLERANCE (±%)	TEST FREQUENCY L(KHz)	DC RESISTANCE (Ω) ± 20%	RATED CURRENT (A) Max.	ITEMP (A) Max.
SLF0745T-3R3M-S	3.3	20	1	0.02	2.5	2.3
SLF0745T-4R7M-S	4.7	20	1	0.03	2	2.1
SLF0745T-6R8M-S	6.8	20	1	0.039	1.7	1.74
SLF0745T-100M-S	10	20	1	0.036	1.3	1.78
SLF0745T-150M-S	15	20	1	0.052	1.1	1.53
SLF0745T-220M-S	22	20	1	0.061	0.9	1.34
SLF0745T-330M-S	33	20	1	0.096	0.82	1.09
SLF0745T-470M-S	47	20	1	0.125	0.75	0.92
SLF0745T-680M-S	68	20	1	0.175	0.6	0.77
SLF0745T-101M-S	100	20	1	0.25	0.5	0.65
SLF0745T-151M-S	150	20	1	0.34	0.4	0.55
SLF0745T-221M-S	220	20	1	0.52	0.33	0.45
SLF0745T-331M-S	330	20	1	0.74	0.25	0.37
SLF0745T-471M-S	470	20	1	1.05	0.22	0.31
SLF0745T-681M-S	680	20	1	1.48	0.2	0.27
SLF0745T-102M-S	1000	20	1	2.28	0.14	0.25

IDC current : Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Itemp current : Value obtained when current flows and the temperature has risen to 20°C.

Test Equipment Inductance : HP4192A LF Impedance Analyzer or Equivalent (Test Frequency : 1KHz/0.5V)

RDC : SC-7401 Digital Multimeter ,or Equivalent

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (μH)	TEST Frequency	RDC (Ω) ± 20%	IDC (A)Max	ITEMP (A) Max.
SLF0745T-3R3 □ -N	3.3	0.5V 1KHZ	0.02	2.5	2.3
SLF0745T-4R7 □ -N	4.7	0.5V 1KHZ	0.03	2	2.1
SLF0745T-6R8 □ -N	6.8	0.5V 1KHZ	0.039	1.7	1.74
SLF0745T-100 □ -N	10	0.5V 1KHZ	0.036	1.3	1.78
SLF0745T-150 □ -N	15	0.5V 1KHZ	0.052	1.1	1.53
SLF0745T-220 □ -N	22	0.5V 1KHZ	0.061	0.9	1.34
SLF0745T-330 □ -N	33	0.5V 1KHZ	0.096	0.82	1.09
SLF0745T-470 □ -N	47	0.5V 1KHZ	0.125	0.75	0.92
SLF0745T-680 □ -N	68	0.5V 1KHZ	0.175	0.6	0.77
SLF0745T-101 □ -N	100	0.5V 1KHZ	0.25	0.5	0.65
SLF0745T-151 □ -N	150	0.5V 1KHZ	0.34	0.4	0.55
SLF0745T-221 □ -N	220	0.5V 1KHZ	0.52	0.33	0.45
SLF0745T-331 □ -N	330	0.5V 1KHZ	0.74	0.25	0.37
SLF0745T-471 □ -N	470	0.5V 1KHZ	1.05	0.22	0.31
SLF0745T-681 □ -N	680	0.5V 1KHZ	1.48	0.2	0.27
SLF0745T-102 □ -N	1000	0.5V 1KHZ	2.28	0.14	0.25

NOTE : □ -tolerance M=±20%

1.IDC Current : Value obtained when DC current flows and the initial value of inductance has fallen by 30%.

2.Itemp Current : Value obtained when current flows and the temperature has risen to 25°C.

3.40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS SLF1045 SERIES

PART NO.	INDUCTANCE (μH)	TOLERANCE (±%)	TEST FREQUENCY L(KHz)	DC RESISTANCE (Ω) ± 20%	RATED CURRENT (A) Max.	ITEMP (A) Max.
SLF1045T-100M-S	10	20	1	0.0364	3	2.5
SLF1045T-150M-S	15	20	1	0.0472	2.4	2.2
SLF1045T-220M-S	22	20	1	0.0591	2.1	1.9
SLF1045T-330M-S	33	20	1	0.0815	1.6	1.7
SLF1045T-470M-S	47	20	1	0.1	1.4	1.5
SLF1045T-680M-S	68	20	1	0.14	1.2	1.3
SLF1045T-101M-S	100	20	1	0.2	1	1.1
SLF1045T-151M-S	150	20	1	0.35	0.79	0.81
SLF1045T-221M-S	220	20	1	0.47	0.65	0.7
SLF1045T-331M-S	330	20	1	0.68	0.54	0.58
SLF1045T-471M-S	470	20	1	1.03	0.47	0.47
SLF1045T-681M-S	680	20	1	1.6	0.38	0.38
SLF1045T-102M-S	1000	20	1	2.8	0.32	0.29
SLF1045T-152M-S	1500	20	1	3.4	0.22	0.26

IDC current : Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Itemp current : Value obtained when current flows and the temperature has risen to 30°C.

Test Equipment Inductance : HP4192A LF Impedance Analyzer or Equivalent (Test Frequency : 1KHz/0.5V)

RDC : SC-7401 Digital Multimeter ,or Equivalent

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (μH)	TEST Frequency	RDC (Ω) ± 20%	IDC (A)Max	ITEMP (A) Max.
SLF1045T-100 □ -N	10	0.5V 1KHZ	0.0364	3	2.5
SLF1045T-150 □ -N	15	0.5V 1KHZ	0.0472	2.4	2.2
SLF1045T-220 □ -N	22	0.5V 1KHZ	0.0591	2.1	1.9
SLF1045T-330 □ -N	33	0.5V 1KHZ	0.0815	1.6	1.7
SLF1045T-470 □ -N	47	0.5V 1KHZ	0.1	1.4	1.5
SLF1045T-680 □ -N	68	0.5V 1KHZ	0.14	1.2	1.3
SLF1045T-101 □ -N	100	0.5V 1KHZ	0.2	1	1.1
SLF1045T-151 □ -N	150	0.5V 1KHZ	0.35	0.79	0.81
SLF1045T-221 □ -N	220	0.5V 1KHZ	0.47	0.65	0.7
SLF1045T-331 □ -N	330	0.5V 1KHZ	0.68	0.54	0.58
SLF1045T-471 □ -N	470	0.5V 1KHZ	1.03	0.47	0.47
SLF1045T-681 □ -N	680	0.5V 1KHZ	1.6	0.38	0.38
SLF1045T-102 □ -N	1000	0.5V 1KHZ	2.8	0.32	0.29
SLF1045T-152 □ -N	1500	0.5V 1KHZ	3.4	0.22	0.26

NOTE : □ -tolerance M=±20%

1.IDC Current : Value obtained when DC current flows and the initial value of inductance has fallen by 30%.

2.Itemp Current : Value obtained when current flows and the temperature has risen to 25°C.

3.40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS SLF1255 SERIES

PART NO.	INDUCTANCE (µH)	TOLERANCE (±%)	TEST FREQUENCY (KHz)	DC RESISTANCE (Ω) ± 20%	RATED CURRENT (A) Max.	ITEMP (A) Max.
SLF1255T-6R0M-S	6	20	1	0.0164	3.6	4.9
SLF1255T-100M-S	10	20	1	0.0215	3.4	4.3
SLF1255T-150M-S	15	20	1	0.0259	2.8	3.9
SLF1255T-220M-S	22	20	1	0.0338	2.3	3.4
SLF1255T-330M-S	33	20	1	0.0415	1.9	3.1
SLF1255T-470M-S	47	20	1	0.0618	1.6	2.5
SLF1255T-680M-S	68	20	1	0.0832	1.3	2.2
SLF1255T-101M-S	100	20	1	0.117	1.1	1.8
SLF1255T-151M-S	150	20	1	0.19	0.88	1.4
SLF1255T-221M-S	220	20	1	0.27	0.72	1.2
SLF1255T-331M-S	330	20	1	0.41	0.59	1
SLF1255T-471M-S	470	20	1	0.52	0.49	0.88
SLF1255T-681M-S	680	20	1	0.76	0.43	0.73
SLF1255T-102M-S	1000	20	1	1.12	0.34	0.6
SLF1255T-152M-S	1500	20	1	1.73	0.29	0.48

IDC current : Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Itemp current : Value obtained when current flows and the temperature has risen to 30°C.

Test Equipment Inductance : HP4192A LF Impedance Analyzer or Equivalent (Test Frequency : 1KHz/0.5V)

RDC : SC-7401 Digital Multimeter ,or Equivalent

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (µH)	TEST Frequency	RDC (Ω) ± 20%	IDC (A)Max	ITEMP (A) Max.
SLF1255T-6R0 □ -N	6	0.5V 1KHZ	0.0164	3.6	4.9
SLF1255T-100 □ -N	10	0.5V 1KHZ	0.0215	3.4	4.3
SLF1255T-150 □ -N	15	0.5V 1KHZ	0.0259	2.8	3.9
SLF1255T-220 □ -N	22	0.5V 1KHZ	0.0338	2.3	3.4
SLF1255T-330 □ -N	33	0.5V 1KHZ	0.0415	1.9	3.1
SLF1255T-470 □ -N	47	0.5V 1KHZ	0.0618	1.6	2.5
SLF1255T-680 □ -N	68	0.5V 1KHZ	0.0832	1.3	2.2
SLF1255T-101 □ -N	100	0.5V 1KHZ	0.117	1.1	1.8
SLF1255T-151 □ -N	150	0.5V 1KHZ	0.19	0.88	1.4
SLF1255T-221 □ -N	220	0.5V 1KHZ	0.27	0.72	1.2
SLF1255T-331 □ -N	330	0.5V 1KHZ	0.41	0.59	1
SLF1255T-471 □ -N	470	0.5V 1KHZ	0.52	0.49	0.88
SLF1255T-681 □ -N	680	0.5V 1KHZ	0.76	0.43	0.73
SLF1255T-102 □ -N	1000	0.5V 1KHZ	1.12	0.34	0.6
SLF1255T-152 □ -N	1500	0.5V 1KHZ	1.73	0.29	0.48

NOTE : □ -tolerance M=±20%

1.IDC Current : Value obtained when DC current flows and the initial value of inductance has fallen by 30%.

2.Itemp Current : Value obtained when current flows and the temperature has risen to 25°C.

3.40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS SLF1265 SERIES

PART NO.	INDUCTANCE (μH)	TOLERANCE (±%)	TEST FREQUENCY (KHz)	DC RESISTANCE (Ω) ± 20%	RATED CURRENT (A) Max.	ITEMP (A) Max.
SLF1265T-2R0M-S	2	30	1	0.0117	10	6.2
SLF1265T-4R2M-S	4.2	30	1	0.015	7.3	5.5
SLF1265T-7R0M-S	7	30	1	0.0177	5.7	5
SLF1265T-100M-S	10	20	1	0.0202	5	4.8
SLF1265T-150M-S	15	20	1	0.0237	4.2	4.4
SLF1265T-220M-S	22	20	1	0.0316	3.5	3.8
SLF1265T-330M-S	33	20	1	0.0406	2.8	3.4
SLF1265T-470M-S	47	20	1	0.0578	2.4	2.8
SLF1265T-680M-S	68	20	1	0.0787	2	2.4
SLF1265T-101M-S	100	20	1	0.123	1.6	1.9
SLF1265T-221M-S	220	20	1	0.273	1	1.2

IDC current : Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Itemp current : Value obtained when current flows and the temperature has risen to 40°C.

Test equipment Inductance : HP4192A LF Impedance Analyzer or Equivalent (Test Frequency : 1KHz/0.5V)

RDC : SC-7401 Digital Multimeter ,or Equivalent

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (μH)	TEST Frequency	RDC (Ω) ± 20%	IDC (A)Max	ITEMP (A) Max.
SLF1265T-2R0 □ -N	2	0.5V 1KHZ	0.0117	10	6.2
SLF1265T-4R2 □ -N	4.2	0.5V 1KHZ	0.015	7.3	5.5
SLF1265T-7R0 □ -N	7	0.5V 1KHZ	0.0177	5.7	5
SLF1265T-100 □ -N	10	0.5V 1KHZ	0.0202	5	4.8
SLF1265T-150 □ -N	15	0.5V 1KHZ	0.0237	4.2	4.4
SLF1265T-220 □ -N	22	0.5V 1KHZ	0.0316	3.5	3.8
SLF1265T-330 □ -N	33	0.5V 1KHZ	0.0406	2.8	3.4
SLF1265T-470 □ -N	47	0.5V 1KHZ	0.0578	2.4	2.8
SLF1265T-680 □ -N	68	0.5V 1KHZ	0.0787	2	2.4
SLF1265T-101 □ -N	100	0.5V 1KHZ	0.123	1.6	1.9
SLF1265T-221 □ -N	220	0.5V 1KHZ	0.273	1	1.2

NOTE : □ -tolerance M=±20%

1.IDC Current : Value obtained when DC current flows and the initial value of inductance has fallen by 30%.

2.Itemp Current : Value obtained when current flows and the temperature has risen to 25°C.

3.40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

ELECTRICAL CHARACTERISTICS SLF1275 SERIES

PART NO.	INDUCTANCE (µH)	TOLERANCE (±%)	TEST FREQUENCY (KHz)	DC RESISTANCE (Ω) ± 20%	RATED CURRENT (A) Max.	ITEMP (A) Max.
SLF1275T-1R2M-S	1.2	30	1	0.0069	13	8.2
SLF1275T-2R7M-S	2.7	30	1	0.0094	10	7
SLF1275T-3R9M-S	3.9	30	1	0.0104	9	6.7
SLF1275T-5R6M-S	5.6	30	1	0.0116	7.8	6.3
SLF1275T-6R8M-S	6.8	30	1	0.0131	7.2	5.9
SLF1275T-100M-S	10	20	1	0.0156	5.5	5.4
SLF1275T-150M-S	15	20	1	0.0184	4.7	5
SLF1275T-220M-S	22	20	1	0.0263	4	4
SLF1275T-330M-S	33	20	1	0.0395	3.2	3.4
SLF1275T-470M-S	47	20	1	0.0528	2.7	3
SLF1275T-680M-S	68	20	1	0.0778	2	2.4
SLF1275T-101M-S	100	20	1	0.125	1.9	1.9
SLF1275T-151M-S	150	20	1	0.175	1.5	1.6
SLF1275T-221M-S	220	20	1	0.258	1.3	1.3

IDC Current : Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Itemp Current : Value obtained when current flows and the temperature has risen to 40°C.

Test Equipment Inductance : HP4192A LF Impedance Analyzer or Equivalent (Test Frequency : 1KHz/0.5V)

RDC : SC-7401 Digital Multimeter ,or Equivalent

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (µH)	TEST Frequency	RDC (Ω) ± 20%	IDC (A)Max	ITEMP (A) Max.
SLF1275T-1R2T-N	1.2	0.5V 1KHZ	0.0069	13	8.2
SLF1275T-2R7T-N	2.7	0.5V 1KHZ	0.0094	10	7
SLF1275T-3R9T-N	3.9	0.5V 1KHZ	0.0104	9	6.7
SLF1275T-5R6T-N	5.6	0.5V 1KHZ	0.0116	7.8	6.3
SLF1275T-6R8T-N	6.8	0.5V 1KHZ	0.0131	7.2	5.9
SLF1275T-100 □ -N	10	0.5V 1KHZ	0.0156	5.5	5.4
SLF1275T-150 □ -N	15	0.5V 1KHZ	0.0184	4.7	5
SLF1275T-220 □ -N	22	0.5V 1KHZ	0.0263	4	4
SLF1275T-330 □ -N	33	0.5V 1KHZ	0.0395	3.2	3.4
SLF1275T-470 □ -N	47	0.5V 1KHZ	0.0528	2.7	3
SLF1275T-680 □ -N	68	0.5V 1KHZ	0.0778	2	2.4
SLF1275T-101 □ -N	100	0.5V 1KHZ	0.125	1.9	1.9
SLF1275T-151 □ -N	150	0.5V 1KHZ	0.175	1.5	1.6
SLF1275T-221 □ -N	220	0.5V 1KHZ	0.258	1.3	1.3

NOTE : □ -tolerance M=±20% / T=±30%

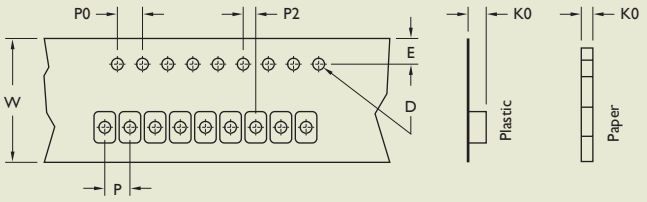
1.IDC Current : Value obtained when DC current flows and the initial value of inductance has fallen by 30%.

2.Itemp Current : Value obtained when current flows and the temperature has risen to 25°C.

3.40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

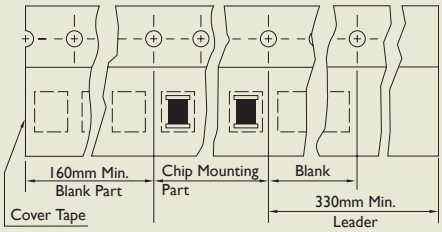
TAPE DIMENSIONS



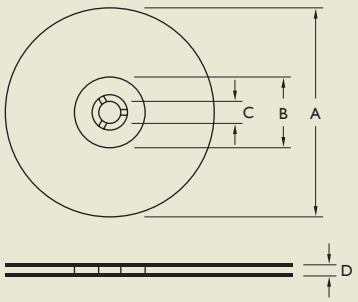
TAPE MATERIAL

Camer Tape : Polystyrene

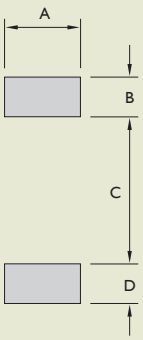
Cover Type : Polyethylene



REEL DIMENSIONS



RECOMMENDED PATTERN



Dimensions : mm

TYPE	TAPE DIMENSIONS							RECOMMENDED PATTERN				REEL DIMENSIONS				QUANTITY PCS/REEL
	K0	D	E	W	P	P0	P2	A	B	C	D	A	B	C	D	
SLF0628	3.5	1.55	1.75	16	12	4	2	2.2	1.5	4	1.5	330	100	13	17.4	1000
SLF0728	3.5	1.55	1.75	16	12	4	2	2.2	1.5	4.9	1.5	330	100	13	17.4	1000
SLF0730	3.7	1.55	1.75	16	12	4	2	2.2	1.5	4.9	1.5	330	100	13	17.4	1000
SLF0732	4	1.55	1.75	16	12	4	2	2.2	1.5	4.9	1.5	330	100	13	17.4	1000
SLF0745	5.5	1.55	1.75	16	12	4	2	2.2	1.5	4.9	1.5	330	100	13	17.4	1000
SLF1045	5.5	1.55	1.75	24	24	4	2	3.2	2.5	5.6	2.5	330	100	13	24.4	500
SLF1255	6.5	1.55	1.75	24	24	4	2	3.2	2.5	8.6	2.5	330	100	13	24.4	500
SLF1265	7.5	1.55	1.75	24	24	4	2	3.2	2.5	8.6	2.5	330	100	13	24.4	500
SLF1275	8.5	1.55	1.75	24	24	4	2	3.2	2.5	8.6	2.5	330	100	13	24.4	500

SLF SERIES RELIABILITY TEST

1-1 MECHANICAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-1-1	Vibration	Appearance : No Damage L Change : within ±10% Q Change : within ±30% RDC : within Specification	Test device shall be soldered on the substrate. Oscillation Frequency : 10 to 55 to 10Hz for 1Min. Amplitude : 1.5mm Time : 2Hrs. for each Axis (X,Y & Z), Total 6Hrs.
1-1-2	Resistance to Soldering Heat	Appearance : No Damage	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 260 ± 5°C Immersion Time : 10 ± 1Sec.
1-1-3	Solderability	The electrodes shall be at least 90% covered with new solder coating.	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 230 ± 5°C Immersion Time : 4 ± 1Sec.

1-2 ENVIRONMENTAL PERFORMANCE

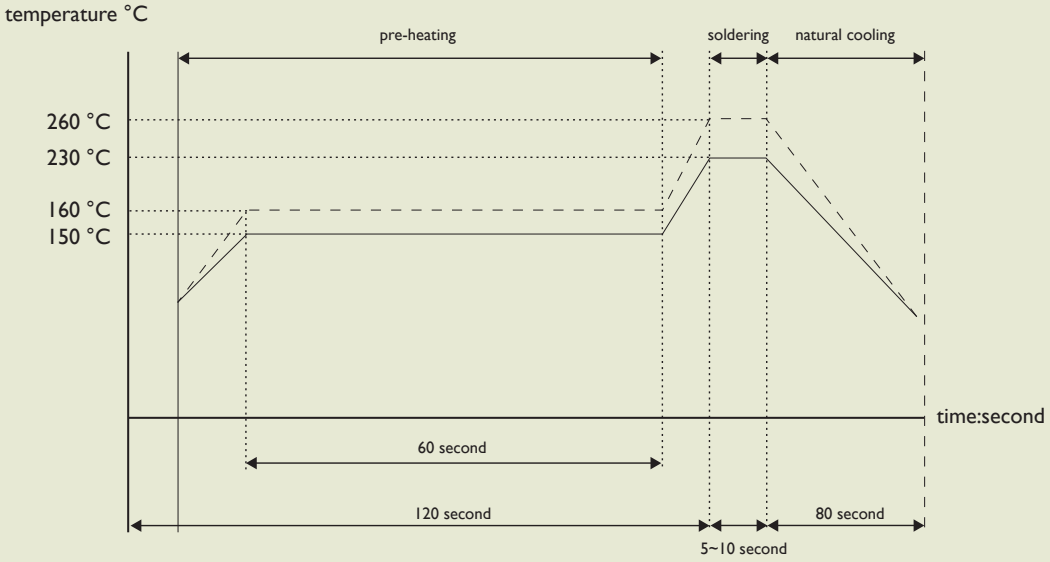
NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-2-1	Temperature Shock	Appearance : No Damage L Change : within ±10% L Change : within ±30% RDC : within Specification	10 Cycles (Air to Air) 1 Cycles shall Consist of : 30Min. Exposure to -55°C 30Min. Exposure to 125°C 15Sec. Max. Transition between Temperatures Measured after Exposure in the Room Condition for 24Hrs.
1-2-2	Temperature Cycle		One Cycle

Step	Temperature (°C)	Time (Min.)
1	-25 ± 3	30
2	25 ± 2	3
3	85 ± 3	30
4	25 ± 2	3

		Total : 100 Cycles Measured after Exposure in the Room Condition for 24Hrs.
1-2-3	Humidity Resistance	Temperature : 40 ± 2°C Relative Humidity : 90 ~ 95% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-4	High Temperature Resistance	Temperature : 85 ± 3°C Relative Humidity : 20% Applied Current : Rated Current Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-5	Low Temperature Resistance	Temperature : -25 ± 3°C Relative Humidity : 0% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters, Transformers, Current Sensors



for: lead solder

for: lead-free solder

SLF 1055 Series

Low Profile Low Power Low & high Current

For SSL series provide excellent current carrying capabilities in a small footprint. They have a flat top for reliable pick and place operations and features robust temperature deflection. In addition to the standard versions shown here, custom inductors are available to meet your exact requirement.

APPLICATIONS

Portable telephones, computers, hard disk drives and other electronic equipment

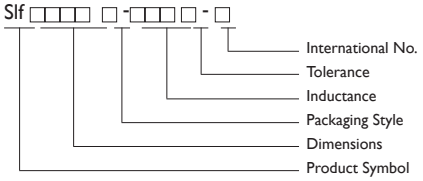
Operating Temperature: -20°C~85°C

FEATURES

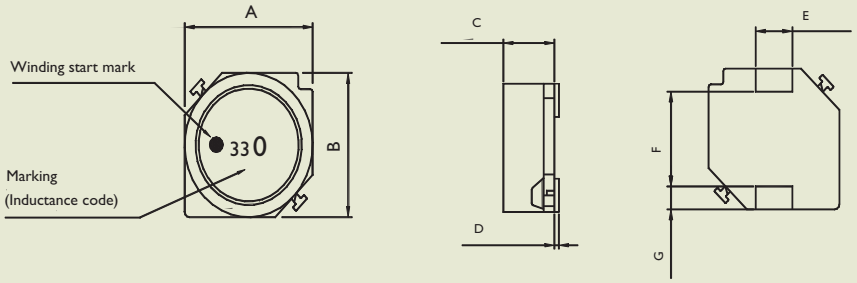
Low resistance and high currents

- Packaging: T : Tape and Reel
- Tolerance : M : ±20%
- Note: YAGEO has released lead-free products of SLF Series and Internal No. will be changed to "N" as identification. Ex. SLF1055T-100M-N

PRODUCT IDENTIFICATION



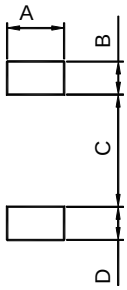
SHAPES AND DIMENSIONS



Dimensions : mm

A	B	C	D	E	F	G
10.1±0.3	10.1±0.3	5.5±0.3	0.15TYP	3TYP	6.0TYP	2.0TYP

RECOMMENDED PATTERN



Dimensions : mm

A	B	C	D
3.2	2.5	5.6	2.5

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (μH)	TOLERANCE (±%)	TEST FREQUENCY I(KHz)	DC RESISTANCE (Ω) ± 20%	RATED CURRENT (A) Max.
SLF1055T-100M-S	10	20	1	40	3.5
SLF1055T-330M-S	33	20	1	85	2.1

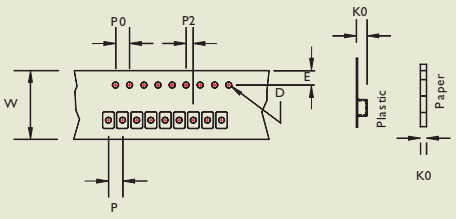
• Rated current:Value obtaned when DC current flows and the initial value of inductance has by 15%

• Test equipment Inductance: HP4192A LF impedance analyzer or equivalent(Test frequency: 1KHz/0.5V)

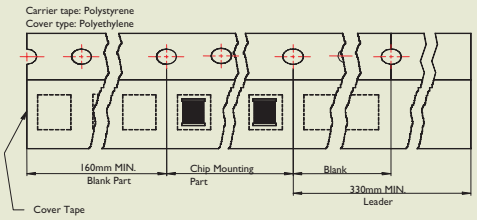
• RDC: CH502BC Digital multimeter, or equivalent.

PACKAGING SPECIFICATIONS

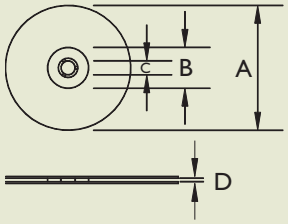
Tape Dimensions



Tape Material



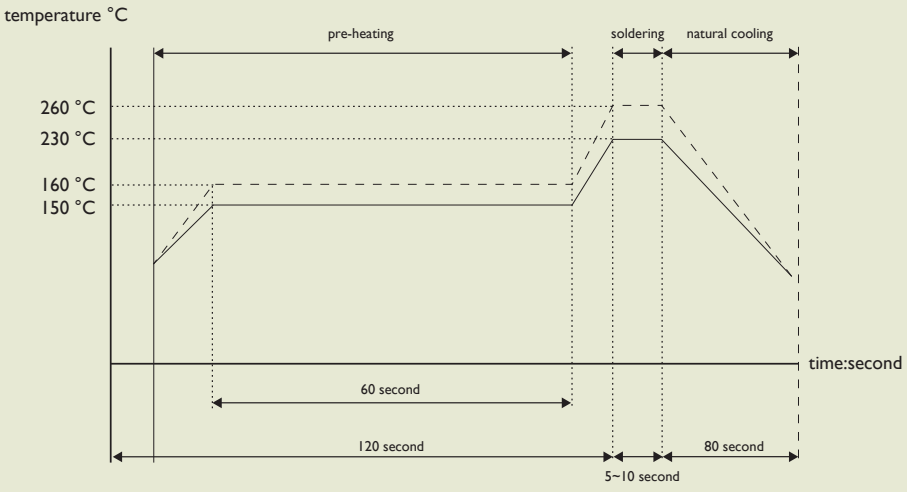
Reel Dimensions



TYPE	TAPE DIMENSIONS							REEL DIMENSIONS				QUANTITY
	K0	D	E	W	P	P0	P2	A	B	C	D	PCS/REEL
SLF1055	6.5	1.55	1.75	24	24	4	2	330	100	13	24.4	500

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



for: lead solder

for: lead-free solder

SDT0402 Series

SMD Power Inductors

APPLICATIONS

Board mounted DC-DC converters

Miniature power supplies, and voltage multiplying circuits.

These inductors are designed for a wide variety of applications including board mounted DC-DC converters, miniature power supplies, and voltage multiplying circuits. They function equally well in filter and smoothing circuit applications.

The Yageo SDT Series represents the ultimate in cost effective miniature power inductors. They are constructed of materials specially developed for surface mount applications to ensure the best possible reliability and ease of using and handling.

Because of their " swinging " inductance vs. current characteristics, the SSL0402 Series can be used as ultra high L inductors at zero or low current.

SPECIFICATIONS

PART NO.	INDUCTANCE @100KHz, 0 Adc (µH ± 20%)	DC RESISTANCE (Ω) Max.	OPERATING PARAMETERS: INDUCTANCE RATING * (µH)	CURRENT RAGING ** (A)	ENERGY STORAGE (µ Joules) Max.	SWITCHING FREQUECNY Max.	SRF (MHz)
SDT0402T-1R0M-S	1.0	0.045	0.60	2.0	1.8	1 MHz	157
SDT0402T-1R5M-S	1.5	0.050	0.80	1.9	1.8	1 MHz	108
SDT0402T-2R2M-S	2.2	0.060	0.90	1.5	1.8	1 MHz	92
SDT0402T-3R3M-S	3.3	0.070	1.5	1.2	1.4	1 MHz	69
SDT0402T-4R7M-S	4.7	0.080	2.0	1.2	1.6	1 MHz	59
SDT0402T-6R8M-S	6.8	0.085	3.0	1.0	1.9	1 MHz	51
SDT0402T-100M-S	10	0.095	5.0	0.7	1.2	1 MHz	33
SDT0402T-150M-S	15	0.135	6.0	0.6	1.1	1 MHz	26
SDT0402T-220M-S	22	0.160	10	0.5	1.2	1 MHz	20
SDT0402T-330M-S	33	0.275	12	0.45	1.5	1 MHz	17
SDT0402T-470M-S	47	0.340	20	0.34	1.3	1 MHz	12
SDT0402T-680M-S	68	0.575	30	0.29	1.4	1 MHz	11
SDT0402T-101M-S	100	1.100	40	0.24	1.5	1 MHz	9.4
SDT0402T-151M-S	150	1.400	60	0.20	1.4	500 KHz	6.7
SDT0402T-221M-S	220	2.250	90	0.17	1.6	500 KHz	6.1
SDT0402T-331M-S	330	2.900	100	0.16	1.4	500 KHz	4.7
SDT0402T-471M-S	470	3.600	150	0.14	1.5	500 KHz	3.85
SDT0402T-681M-S	680	4.550	200	0.12	1.4	500 KHz	3.1
SDT0402T-102M-S	1000	8.100	400	0.08	1.4	500 KHz	2.3

* Measured at the rated current. Refer to curves below for more detail.

** Average maximum allowable current. SDT Series inductors are designed for current spikes as high as 2X the current rating.

Operating Temperature Range -40°C to +85°C

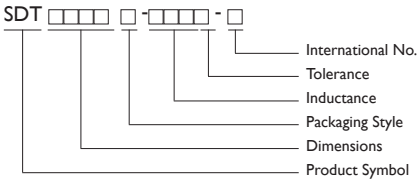
FEATURES

Ultra high L and low current

Functions equally well in filter and smoothing circuit applications.

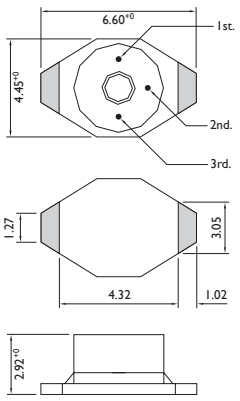
• Available in 2 sizes.

PRODUCT IDENTIFICATION



• Packaging: T: Tape and Reel
• Tolerance: M: ±20%
• Note: YAGEO will start to release SDT Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to "N" as identification.
Ex. SDT0402T-1R0M-N

SHAPES AND DIMENSIONS



Dimensions : mm

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (UH)	RDC (Ω)MAX	SRF (MHz)typ	CURRENT RATING (A)	Inductan CE (uH)	MAX ENERGY (uJoules)	MAX SWITCHIN Frequency
SDT0402T-1R0 □ -N	1	0.045	157	2	0.6	1.8	1MHz
SDT0402T-1R5 □ -N	1.5	0.05	108	1.9	0.8	1.8	1MHz
SDT0402T-2R2 □ -N	2.2	0.06	92	1.5	0.9	1.8	1MHz
SDT0402T-3R3 □ -N	3.3	0.07	69	1.2	1.5	1.4	1MHz
SDT0402T-4R7 □ -N	4.7	0.08	59	1.2	2	1.6	1MHz
SDT0402T-6R8 □ -N	6.8	0.085	51	1	3	1.9	1MHz
SDT0402T-100 □ -N	10	0.095	33	0.7	5	1.2	1MHz
SDT0402T-150 □ -N	15	0.135	26	0.6	6	1.1	1MHz
SDT0402T-220 □ -N	22	0.16	20	0.5	10	1.2	1MHz
SDT0402T-330 □ -N	33	0.275	17	0.45	12	1.5	1MHz
SDT0402T-470 □ -N	47	0.34	12	0.34	20	1.3	1MHz
SDT0402T-680 □ -N	68	0.575	11	0.29	30	1.4	1MHz
SDT0402T-101 □ -N	100	1.1	9.4	0.24	40	1.5	1MHz
SDT0402T-151 □ -N	150	1.4	6.7	0.2	60	1.4	500kHz
SDT0402T-221 □ -N	220	2.25	6.1	0.17	90	1.6	500kHz
SDT0402T-331 □ -N	330	2.9	4.7	0.16	100	1.4	500kHz
SDT0402T-471 □ -N	470	3.6	3.85	0.14	150	1.5	500kHz
SDT0402T-681 □ -N	680	4.55	3.1	0.12	200	1.4	500kHz
SDT0402T-102 □ -N	1000	8.1	2.3	0.08	400	1.4	500kHz

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

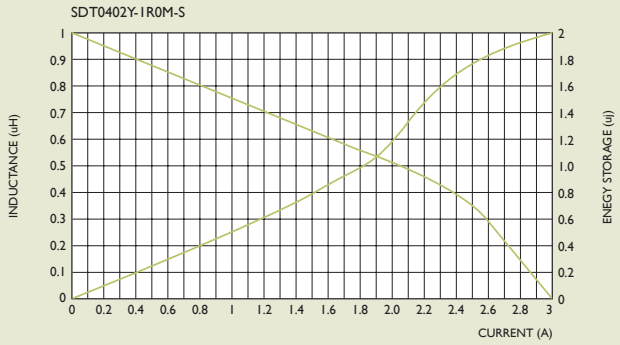
1.Operating temperature range -40°C~85°C

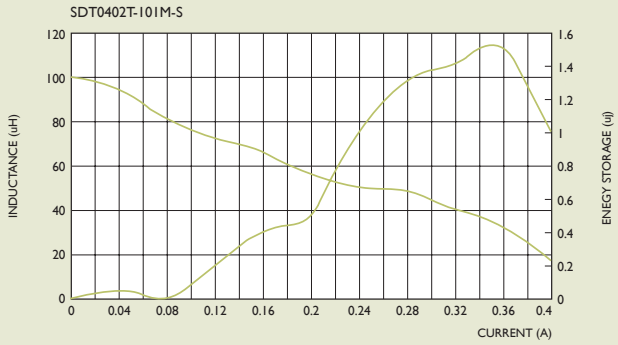
2.Inductance Rating: Measured at the ratted current.SDT Series inductors are design for current

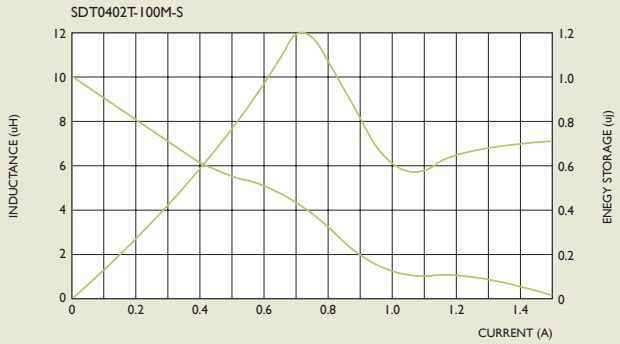
3. Current Raging:Average maximum allowable current.SDT Series inductors are design for current spikes as high as 2X the current rating;TEST FREQUENCY :100 KHz/0.1V

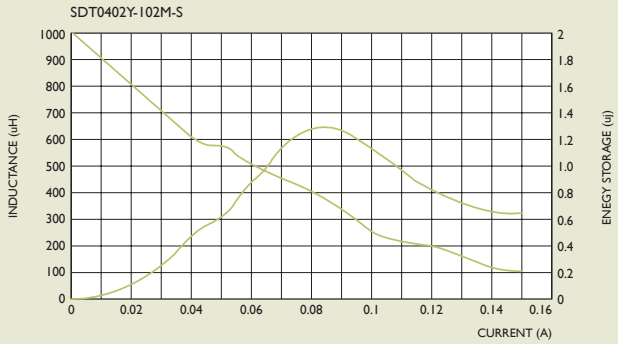
"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

TYPICAL INDUCTANCE ENERGY STORAGE VS. CURRENT



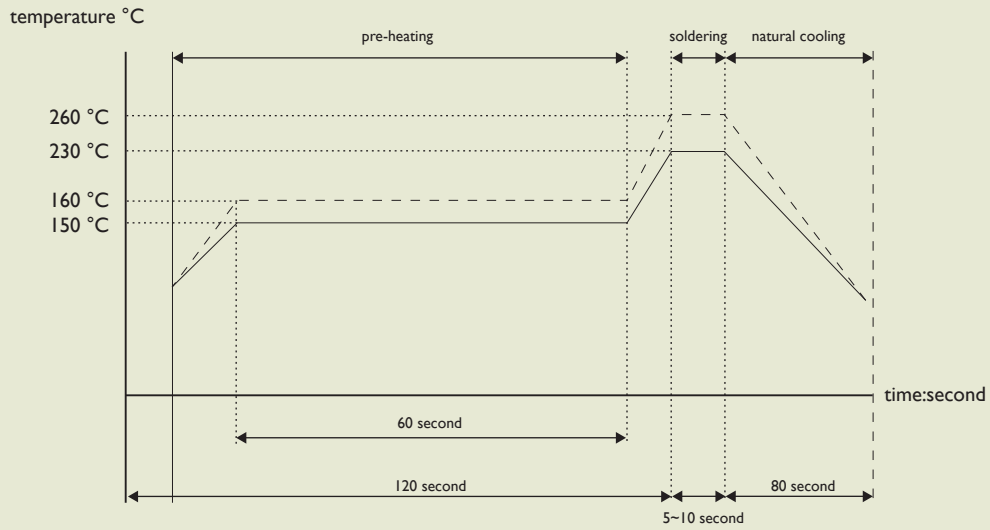






RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



for: lead solder

for: lead-free solder

SMD Power Inductors

SDT0804 Series

FEATURES

- Ultra high L and low current
- Functions equally well in filter and smoothing circuit applications.
- Available in 2 sizes.

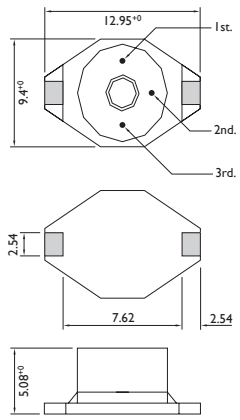
PRODUCT IDENTIFICATION

SDT □□□□ □ -□□□□ - □

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

- Packaging: T: Tape and Reel
- Tolerance: M: ±20%
- Note: YAGEO will start to release SDT Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and TAGEO Internal No will be changed to "N" as identification. Ex. SDT0402T-1R0M-N

SHAPES AND DIMENSIONS



Dimensions : mm

APPLICATIONS

Board mounted DC-DC converters

Miniature power supplies, and voltage multiplying circuits.

These inductors are designed for a wide variety of applications including board mounted DC-DC converters, miniature power supplies, and voltage multiplying circuits. They function equally well in filter and smoothing circuit applications.

The Yageo SDT Series represents the ultimate in cost effective miniature power inductors. They are constructed of materials specially developed for surface mount applications to ensure the best possible reliability and ease of use and handling.

SPECIFICATIONS			OPERATING PARAMETERS				
PART NO.	INDUCTANCE @100KHZ, 0 ADC (μH ±20%)	DC RESISTANCE (Ω) Max.	SRF TYP (MHz)	INDUCTANCE RATING * (ΩH)	CURRENT RAGING ** (A)	ENERGY STORAGE (μ JOULES) Max.	SWITCHING FREQUENCY Max.
SDT0804T-1R0M-S	1.0	0.025	60	0.50	5.0	9	1 MHz
SDT0804T-1R5M-S	1.5	0.030	55	0.70	5.0	12	1 MHz
SDT0804T-2R2M-S	2.2	0.035	55	1.00	5.0	15	1 MHz
SDT0804T-3R3M-S	3.3	0.040	50	1.50	5.0	16	1 MHz
SDT0804T-4R7M-S	4.7	0.045	45	2.00	3.0	10	1 MHz
SDT0804T-6R8M-S	6.8	0.050	40	4.00	2.5	14	1 MHz
SDT0804T-100M-S	10	0.055	35	5.00	2.0	11	1 MHz
SDT0804T-150M-S	15	0.060	25	6.00	1.8	12	1 MHz
SDT0804T-220M-S	22	0.084	22	10	1.5	11	1 MHz
SDT0804T-330M-S	33	0.090	18	12	1.3	13	1 MHz
SDT0804T-470M-S	47	0.11	16	27	1.0	13	1 MHz
SDT0804T-680M-S	68	0.15	12	40	0.90	17	1 MHz
SDT0804T-101M-S	100	0.29	9	50	0.80	15	1 MHz
SDT0804T-151M-S	150	0.36	8	80	0.60	15	500 KHz
SDT0804T-221M-S	220	0.39	6	90	0.50	10	500 KHz
SDT0804T-331M-S	330	0.73	5	150	0.40	13	500 KHz
SDT0804T-471M-S	470	0.88	4	200	0.35	13	500 KHz
SDT0804T-681M-S	680	1.15	3	300	0.30	13	500 KHz
SDT0804T-102M-S	1000	1.45	2.5	420	0.25	13	500 KHz

* Measured at the rated current. Refer to curves below for more detail.

** Average maximum allowable current. SDT Series inductors are designed for current spikes as high as 2X the current rating.

Operating Temperature Range -40°C to +85°C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (μH)	RDC (Ω) Max.	SRF (MHz)TYP	CURRENT RAGING (A)	INDUCTANCE CE (uH)	MAX ENERGE (μ JOULES)	MAX SWITCHING Frequency
SDT0804T-1R0 □ -S	1.0	0.025	60	5.0	0.5	9	1 MHz
SDT0804T-1R5 □ -S	1.5	0.030	55	5.0	0.7	12	1 MHz
SDT0804T-2R2 □ -S	2.2	0.035	55	5.0	1	15	1 MHz
SDT0804T-3R3 □ -S	3.3	0.040	50	5.0	1.5	16	1 MHz
SDT0804T-4R7 □ -S	4.7	0.045	45	3.0	2	10	1 MHz
SDT0804T-6R8 □ -S	6.8	0.050	40	2.5	4	14	1 MHz
SDT0804T-100 □ -S	10	0.055	35	2.0	5	11	1 MHz
SDT0804T-150 □ -S	15	0.060	25	1.8	6	12	1 MHz
SDT0804T-220 □ -S	22	0.084	22	1.5	10	11	1 MHz
SDT0804T-330 □ -S	33	0.090	18	1.3	12	13	1 MHz
SDT0804T-470 □ -S	47	0.11	16	1.0	27	13	1 MHz
SDT0804T-680 □ -S	68	0.15	12	0.90	40	17	1 MHz
SDT0804T-101 □ -S	100	0.29	9	0.80	50	15	1 MHz
SDT0804T-151 □ -S	150	0.36	8	0.60	80	15	500 KHz
SDT0804T-221 □ -S	220	0.39	6	0.50	90	10	500 KHz
SDT0804T-331 □ -S	330	0.73	5	0.40	150	13	500 KHz
SDT0804T-471 □ -S	470	0.88	4	0.35	200	13	500 KHz
SDT0804T-681 □ -S	680	1.15	3	0.30	300	13	500 KHz
SDT0804T-102 □ -S	1000	1.45	2.5	0.25	420	13	500 KHz

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

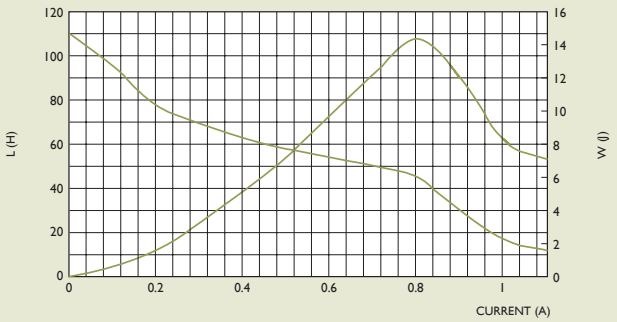
2.Inductance Rating: Measured at the ratted current.SDT Series inductors are design for current

3. Current Raging:Average maximum allowable current.SDT Series inductors are design for current spikes as high as 2X the current rating;TEST FREQUENCY :100 KHz/0.1V

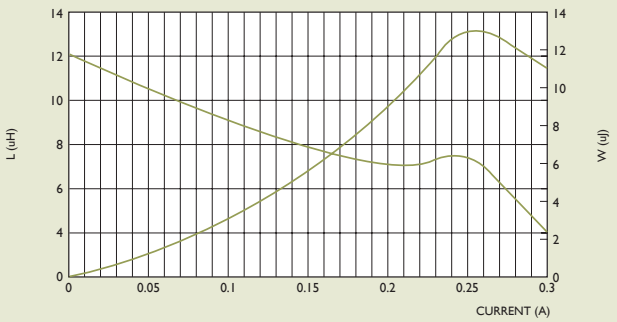
"-N"FOR COMPLETELY LEAD FREETYPE(INCLUDING FERRITE BODY & SOLDER)

TYPICAL INDUCTANCE ENERGY STORAGE VS. CURRENT

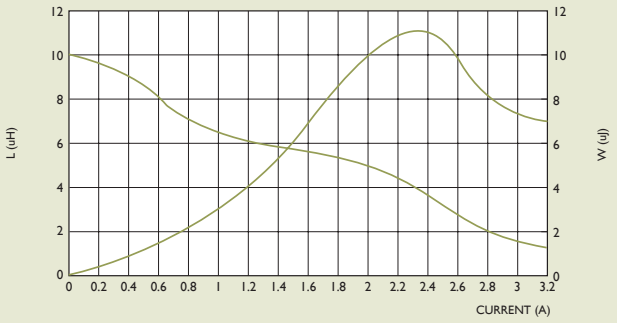
SDT0804T-1R0M-S



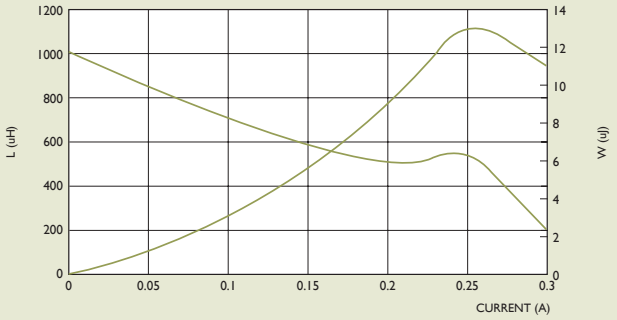
SDT0804T-102M-S



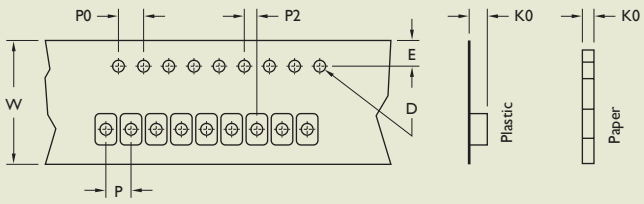
SDT0804T-100M-S



SDT0804T-102M-S



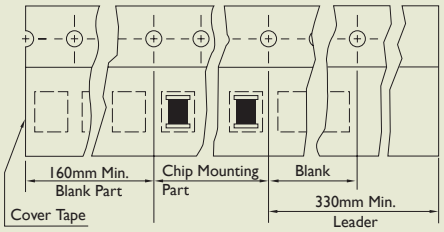
TAPE DIMENSIONS



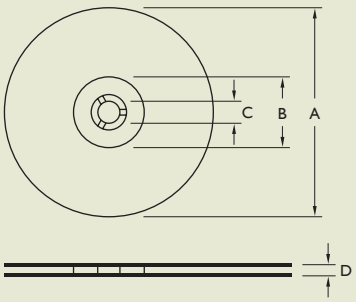
TAPE MATERIAL

Carrier Tape : Polystyrene

Cover Type : Polyethylene

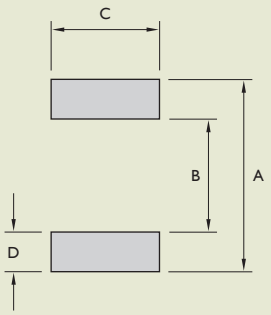


REEL DIMENSIONS



RECOMMENDED PATTERN

Land Pattern



Dimensions : mm

TYPE	TAPE DIMENSIONS							RECOMMENDED PATTERN				REEL DIMENSIONS				QUANTITY PCS/REEL	
	K0	D	E	W	P	P0	P2	A	B	C	D	A	B	C	D	178	330
SDT0402	3.2	1.55	1.75	12	8	4	2	6.86	4.06	3.56	1.40	330	100	13	13.4	-	2500
												178	60	13	13.2	750	-
SDT0804	5.4	1.55	1.75	24	16	4	2	13.21	7.37	2.79	2.92	330	100	13	24.4	-	750

SDT SERIES RELIABILITY TEST

1-1 MECHANICAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-1-1	Vibration	Appearance : No Damage L Change : within ±10% Q Change : within ±30% RDC : within Specification	Test device shall be soldered on the substrate. Oscillation Frequency : 10 to 55 to 10Hz for 1Min. Amplitude : 1.5mm Time : 2Hrs. for each Axis (X,Y & Z), Total 6Hrs.
1-1-2	Resistance to Soldering Heat	Appearance : No Damage	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 260 ± 5°C Immersion Time : 10 ± 1Sec.
1-1-3	Solderability	The electrodes shall be at least 90% covered with new solder coating.	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 230 ± 5°C Immersion Time : 4 ± 1Sec.

1-2 ENVIRONMENTAL PERFORMANCE

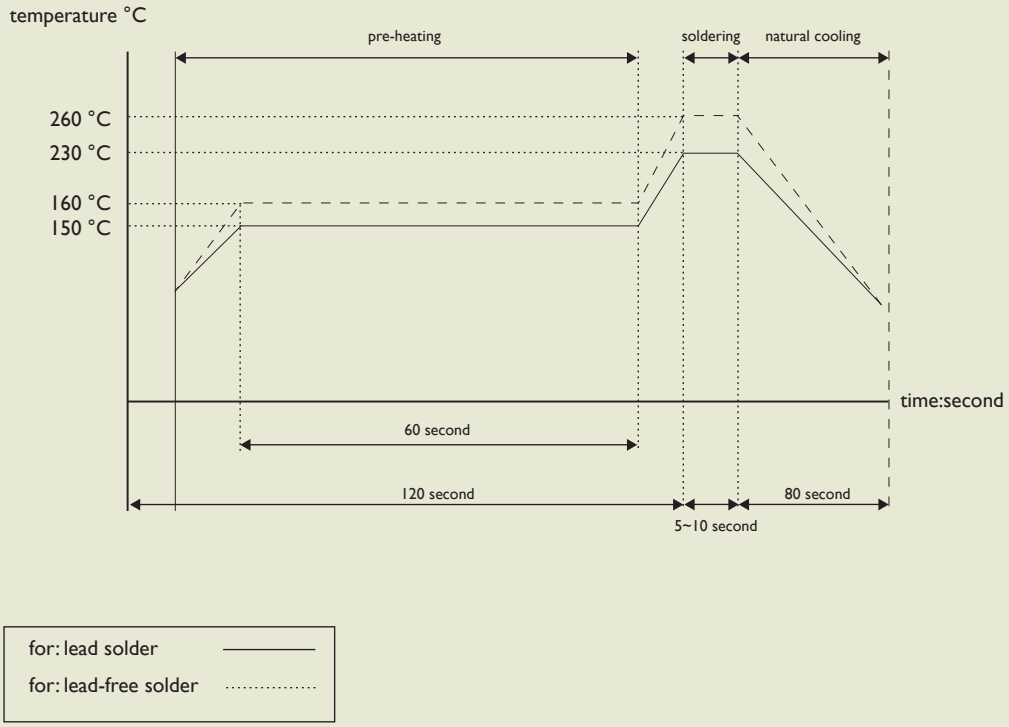
NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-2-1	Temperature Shock	Appearance : No Damage L Change : within ±10% L Change : within ±30% RDC : within Specification	10 Cycles (Air to Air) 1 Cycles shall Consist of : 30Min. Exposure to -55°C 30Min. Exposure to 125°C 15Sec. Max. Transition between Temperatures Measured after Exposure in the Room Condition for 24Hrs.
1-2-2	Temperature Cycle		One Cycle

Step	Temperature (°C)	Time (Min.)
1	-25 ± 3	30
2	25 ± 2	3
3	85 ± 3	30
4	25 ± 2	3

		Total : 100 Cycles Measured after Exposure in the Room Condition for 24Hrs.
1-2-3	Humidity Resistance	Temperature : 40 ± 2°C Relative Humidity : 90 ~ 95% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-4	High Temperature Resistance	Temperature : 85 ± 3°C Relative Humidity : 20% Applied Current : Rated Current Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-5	Low Temperature Resistance	Temperature : -25 ± 3°C Relative Humidity : 0% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



SMD Power Inductors

SSL0618 Series

DESCRIPTION

- 2mm max height
- Inductance range from 1μH to 1000μH
- Current range from 2.3Amps to 0.08Amps
- Very competitive cost design.

PRODUCT IDENTIFICATION

SSL □□□□ □ - □□□□ - □

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

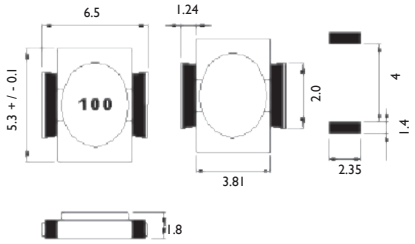
ENVIRONMENTAL DATA

Storage temperature range: -40°C to +125°C

Operating ambient temperature range: -40°C to +85°C (range is application specific). Temperature rise is approximately 40°C at rated rms current

Infrared reflow temperature : +240°C for 30 seconds.

SHAPES AND DIMENSIONS



Dimensions : mm

For SSL series provide excellent current carrying capabilities in a small footprint. They have a flat top for reliable pick and place operations and features robust temperature deflection. In addition to the standard versions shown here, custom inductors are available to meet your exact requirement.

APPLICATIONS

- Digital cameras, CD players, cellular phones, and PDAs
- PCMCIA cards
- GPS systems

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (μH ±20%) *	SRF (MHz)	DC RESISTANCE (Ω^{+0})	Isat ** (A)	Irms *** (A)
SSL0618T-1R0M-S	1.0	230	0.04	2.50	2.30
SSL0618T-1R5M-S	1.5	180	0.06	2.20	2.10
SSL0618T-2R2M-S	2.2	140	0.07	1.80	1.70
SSL0618T-3R3M-S	3.3	110	0.12	1.40	1.30
SSL0618T-4R7M-S	4.7	100	0.15	1.20	1.10
SSL0618T-6R8M-S	6.8	80	0.20	1.10	1.00
SSL0618T-100M-S	10	60	0.26	1.00	0.90
SSL0618T-150M-S	15	45	0.40	0.80	0.70
SSL0618T-220M-S	22	35	0.54	0.60	0.50
SSL0618T-330M-S	33	30	0.74	0.50	0.45
SSL0618T-470M-S	47	22	1.10	0.45	0.40
SSL0618T-680M-S	68	20	1.60	0.35	0.35
SSL0618T-101M-S	100	15	2.30	0.30	0.30
SSL0618T-151M-S	150	10	3.50	0.25	0.25
SSL0618T-221M-S	220	9	5.70	0.20	0.18
SSL0618T-331M-S	330	8	8.20	0.16	0.16
SSL0618T-471M-S	470	7	10.8	0.14	0.12
SSL0618T-681M-S	680	5	17.2	0.12	0.10
SSL0618T-102M-S	1000	4	22.6	0.08	0.08

* Inductance Tested at 100 KHz , 0.1 Vrms

** DC current at which the inductance drops 10% (typ) from its value without current.

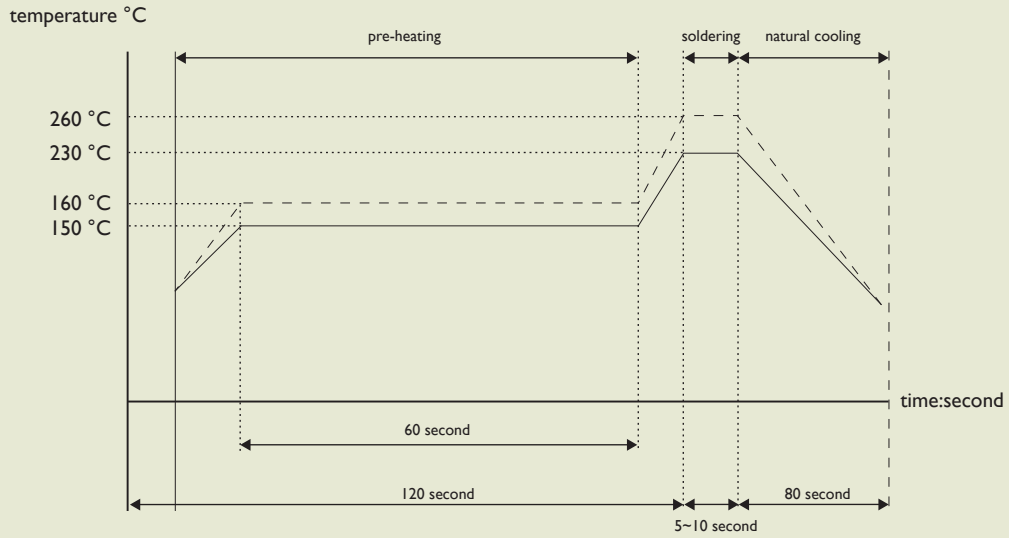
*** Averafe current for a 40°C rise above 25°C ambient.

**** Operating Temperature Range -40°C to +85°C

***** Electroical specifications at 25°C

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



for: lead solder ——————

for: lead-free solder ·····

SMD Power Inductors

SSL0400 Series

FEATURES

High energy storage and very low resistance.

Smallest size and high performance

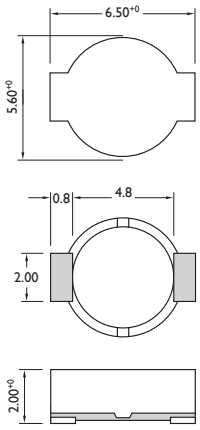
PRODUCT IDENTIFICATION

SSL □□□□ □ -□□□ □ -□

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

- Packaging: T : Tape and Reel
- Tolerance: M: ±20%
- Note: YAGEO will start to release SSL Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to "N" as identification. Ex. SSL04LP-1R2M-N

SHAPES AND DIMENSIONS



Dimensions : mm

This Series is designed for applications requiring high inductance, high current and an ultra-low profile.

The SSL0400T measures only 2 mm high and has a footprint of just 5.3 x 6.5mm. But despite this small size, it is available in versions that will handle up to 2.5 Amps. The series covers a wide range of inductance values from 1µH to 1mH.

The core is completely enclosed in a rugged ceramic case giving it a flat top that provides the optimum surface for reliable pick and place operations.

APPLICATIONS

Notebook computers, Sep-up and step-down converters

Flash, memory programmers. etc...

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE * (µH)	TOLERANCE (±%)	DC RESISTANCE (Ω) Max.	I sat ** (A)	I rms *** (A)
SSL0400T-1R0M-S	1.0	20	0.05	2.5	2.3
SSL0400T-1R5M-S	1.5	20	0.06	2.2	2.1
SSL0400T-2R2M-S	2.2	20	0.07	1.8	1.7
SSL0400T-3R3M-S	3.3	20	0.12	1.4	1.3
SSL0400T-4R7M-S	4.7	20	0.15	1.2	1.1
SSL0400T-6R8M-S	6.8	20	0.20	1.1	1.0
SSL0400T-100M-S	10	20	0.30	1.0	0.90
SSL0400T-150M-S	15	20	0.40	0.8	0.70
SSL0400T-220M-S	22	20	0.54	0.6	0.50
SSL0400T-330M-S	33	20	0.74	0.5	0.45
SSL0400T-470M-S	47	20	1.1	0.45	0.40
SSL0400T-680M-S	68	20	1.6	0.35	0.35
SSL0400T-101M-S	100	20	2.3	0.30	0.30
SSL0400T-151M-S	150	20	3.5	0.25	0.25
SSL0400T-221M-S	220	20	5.7	0.2	0.18
SSL0400T-331M-S	330	20	8.2	0.16	0.16
SSL0400T-471M-S	470	20	10.8	0.14	0.12
SSL0400T-681M-S	680	20	17.2	0.12	0.10
SSL0400T-102M-S	1000	20	22.6	0.08	0.08

* Inductance Tested at 100 KHz, 0.1 Vrms. ** Inductance Drop = 10% Typ. at Isat

*** ΔT = 30°C Rise Typ at Irms Operating Temperature Range -40°C to +85°C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq(KHz)	RDC(Ω)Max	Isat(A)Max	Irms(A)
SSL0400T-1R0 □ -N	1	0.1V 100KHz	0.05	2.5	2.3
SSL0400T-1R5 □ -N	1.5	0.1V 100KHz	0.06	2.2	2.1
SSL0400T-2R2 □ -N	2.2	0.1V 100KHz	0.07	1.8	1.7
SSL0400T-3R3 □ -N	3.3	0.1V 100KHz	0.12	1.4	1.3
SSL0400T-4R7 □ -N	4.7	0.1V 100KHz	0.15	1.2	1.1
SSL0400T-6R8 □ -N	6.8	0.1V 100KHz	0.2	1.1	1
SSL0400T-100 □ -N	10	0.1V 100KHz	0.3	1	0.9
SSL0400T-150 □ -N	15	0.1V 100KHz	0.4	0.8	0.7
SSL0400T-220 □ -N	22	0.1V 100KHz	0.54	0.6	0.5
SSL0400T-330 □ -N	33	0.1V 100KHz	0.74	0.5	0.45
SSL0400T-470 □ -N	47	0.1V 100KHz	1.1	0.45	0.4
SSL0400T-680 □ -N	68	0.1V 100KHz	1.6	0.35	0.35
SSL0400T-101 □ -N	100	0.1V 100KHz	2.3	0.3	0.3
SSL0400T-151 □ -N	150	0.1V 100KHz	3.5	0.25	0.25
SSL0400T-221 □ -N	220	0.1V 100KHz	5.7	0.2	0.18
SSL0400T-331 □ -N	330	0.1V 100KHz	8.2	0.16	0.16
SSL0400T-471 □ -N	470	0.1V 100KHz	10.8	0.14	0.12
SSL0400T-681 □ -N	680	0.1V 100KHz	17.2	0.12	0.1
SSL0400T-102 □ -N	1000	0.1V 100KHz	22.6	0.08	0.08

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

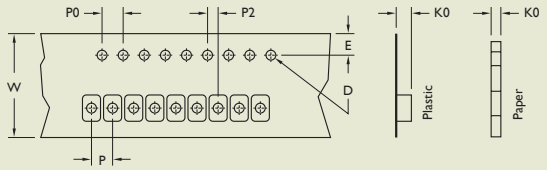
2.Inductance drop = 10% typ. at Isat

3.ΔT=40°C rise typ at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

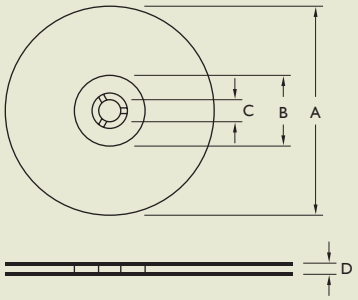
TAPE DIMENSIONS

Dimensions : mm



TYPE	TAPE DIMENSIONS						
	K0	D	E	W	P	P0	P2
SSL0400	1.85	1.5	1.75	12	8	4	2

REEL DIMENSIONS

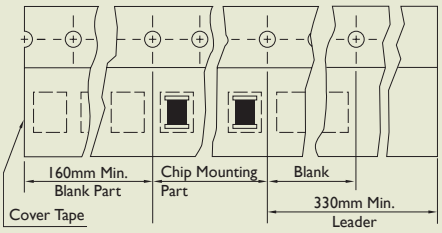


REEL DIMENSIONS				QUANTITY (PCS/REEL)	
A	B	C	D	178MM	330MM
330	100	13	13.4	-	3500
178	60	13	13.2	1000	-

TAPE MATERIAL

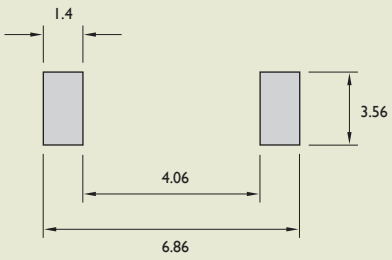
Carrier Tape : Polystyrene

Cover Type : Polyethylene



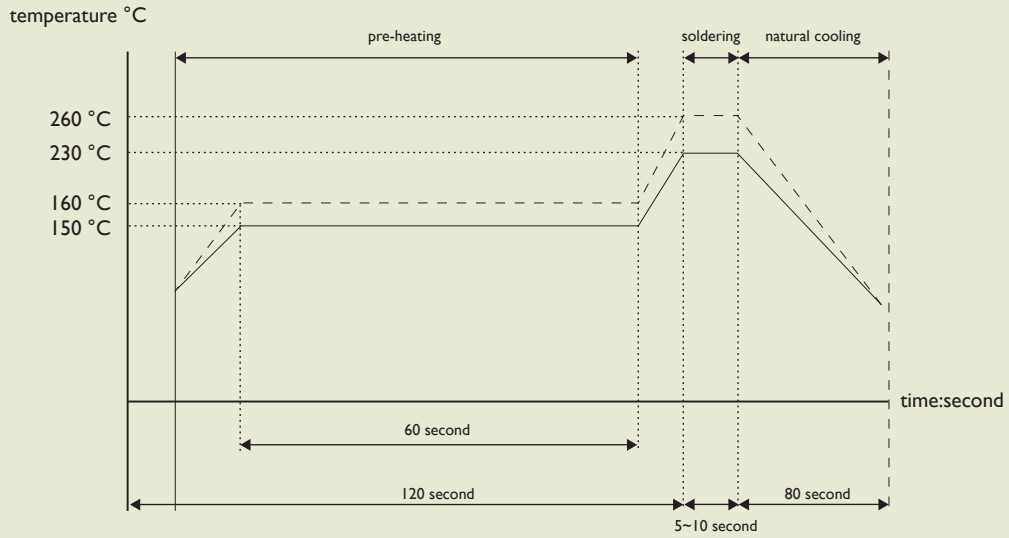
RECOMMENDED PATTERN

Land Pattern



RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



for: lead solder ————

for: lead-free solder ·····

SMD Unshielded Power Inductors

SSL04LP Series

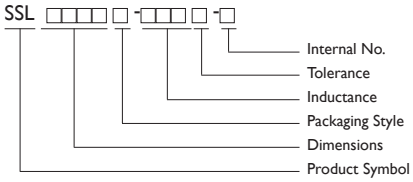
DC-DC Conversion

FEATURES

High energy storage and very low resistance.

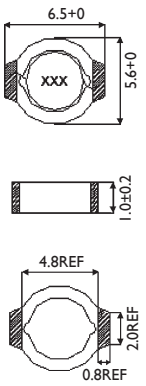
Smallest size and high performance

PRODUCT IDENTIFICATION



- Packaging: T : Tape and Reel, B : Bulk
- Tolerance: M: ±20%
- Note: YAGEO will start to release SSL Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to "N" as identification. Ex. SSL04LP-1R2M-N

SHAPES AND DIMENSIONS



Dimensions : mm

For SSL series provide excellent current carrying capabilities in a small footprint. They have a flat top for reliable pick and place operations and features robust temperature deflection. In addition to the standard versions shown here, custom inductors are available to meet your exact requirement.

APPLICATIONS

Notebook computers, Sep-up and step-down converters

Flash, memory programmers. etc...

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (µH) *	TOLERANCE (±%)	DC RESISTANCE (Ω^{+0})max	Isat ** (A)	Irms *** (A)
SSL04LP-1R2M-S	1.2	20	0.08	2.10	1.70
SSL04LP-1R5M-S	1.5	20	0.10	1.90	1.50
SSL04LP-2R2M-S	2.2	20	0.12	1.60	1.40
SSL04LP-3R3M-S	3.3	20	0.16	1.30	1.20
SSL04LP-4R7M-S	4.7	20	0.20	1.10	1.10
SSL04LP-6R8M-S	6.8	20	0.32	0.90	0.85
SSL04LP-100M-S	10	20	0.41	0.80	0.75
SSL04LP-150M-S	15	20	0.55	0.65	0.60
SSL04LP-220M-S	22	20	0.85	0.50	0.52
SSL04LP-330M-S	33	20	1.30	0.40	0.42
SSL04LP-470M-S	47	20	1.80	0.35	0.36
SSL04LP-680M-S	68	20	2.50	0.30	0.30
SSL04LP-101M-S	100	20	3.50	0.25	0.26
SSL04LP-151M-S	150	20	5.00	0.18	0.21
SSL04LP-221M-S	220	20	7.00	0.16	0.18
SSL04LP-331M-S	330	20	15.0	0.13	0.13

* Inductance Tested at 100 KHz , 0.1 Vrms

** Inductance drops =10% typ. at Isat.

*** ΔT=30°C rise typ at Irms

**** Operating Temperature Range -40°C to +85±C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

TYPE	Inductance(μH)	Test Freq(KHz)	RDC(Ω)Max	Isat(A)Max	Irms(A)
SSL04LP-1R2 □ -N	1.2	0.1V 100KHz	0.08	2.1	3.6
SSL04LP-1R5 □ -N	1.5	0.1V 100KHz	0.1	1.9	2.8
SSL04LP-2R2 □ -N	2.2	0.1V 100KHz	0.12	1.6	2.4
SSL04LP-3R3 □ -N	3.3	0.1V 100KHz	0.16	1.3	2
SSL04LP-4R7 □ -N	4.7	0.1V 100KHz	0.2	1.1	1.7
SSL04LP-6R8 □ -N	6.8	0.1V 100KHz	0.32	0.9	1.2
SSL04LP-100 □ -N	10	0.1V 100KHz	0.41	0.8	1.1
SSL04LP-150 □ -N	15	0.1V 100KHz	0.55	0.65	0.9
SSL04LP-220 □ -N	22	0.1V 100KHz	0.85	0.5	0.83
SSL04LP-330 □ -N	33	0.1V 100KHz	1.3	0.4	0.62
SSL04LP-470 □ -N	47	0.1V 100KHz	1.8	0.35	0.52
SSL04LP-680 □ -N	68	0.1V 100KHz	2.5	0.3	0.35
SSL04LP-101 □ -N	100	0.1V 100KHz	3.5	0.25	0.27
SSL04LP-151 □ -N	150	0.1V 100KHz	5	0.18	0.24
SSL04LP-221 □ -N	220	0.1V 100KHz	7	0.16	0.23
SSL04LP-331 □ -N	330	0.1V 100KHz	15	0.13	0.13

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1.Operating temperature range -40°C~85°C

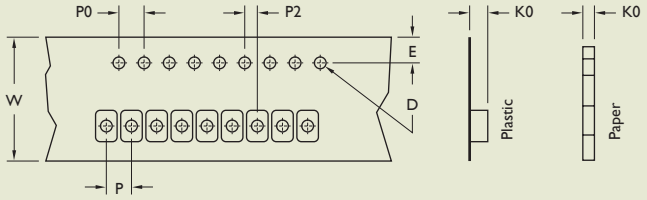
2.Inductance drop = 10% typ. at Isat

3.ΔT=40°C rise typ at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

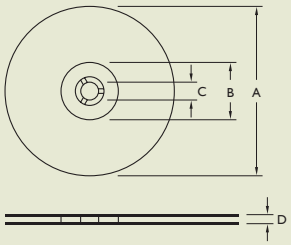
TAPE DIMENSIONS

Dimensions : mm



TYPE	TAPE DIMENSIONS						
	K0	D	E	W	P	P0	P2
SSL04LP	1.30	1.5	1.75	12	8	4	2

REEL DIMENSIONS

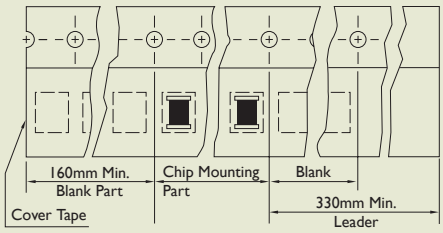


REEL DIMENSIONS				QUANTITY (PCS/REEL)	
A	B	C	D	178MM	330MM
330	100	13	13.4	-	3500
178	60	13	13.2	1000	-

TAPE MATERIAL

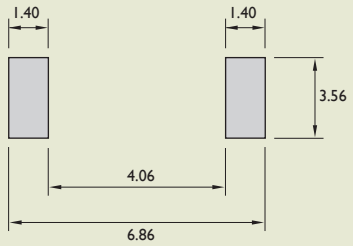
Carrier Tape : Polystyrene

Cover Type : Polyethylene



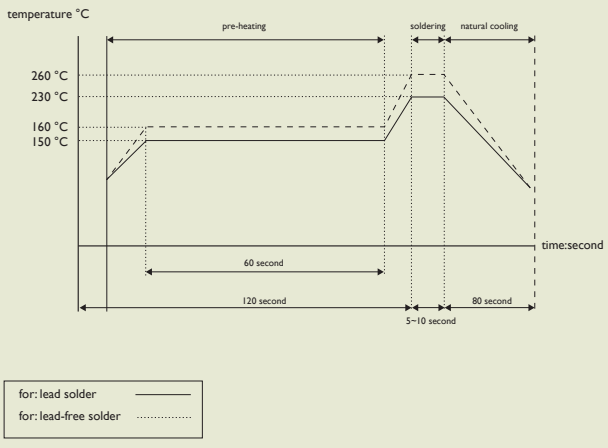
RECOMMENDED PATTERN

Land Pattern



RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



SSL0402 Series

SMD Power Inductors

For SSL series provide excellent current carrying capabilities in a small footprint. They have a flat top for reliable pick and place operations and features robust temperature deflection. In addition to the standard versions shown here, custom inductors are available to meet your exact requirement.

APPLICATIONS

Notebook computers, Sep-up and step-down converters

Flash, memory programmers. Etc...

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (µH ± 20%) *	SRF (MHz)	DC RESISTANCE (Ω*0)	Isat ** (A)	Irms *** (A)
SSL0402T-1R0M-S	1.0	130	0.05	2.90	2.9
SSL0402T-1R5M-S	1.5	115	0.05	2.60	2.8
SSL0402T-2R2M-S	2.2	90	0.07	2.30	2.4
SSL0402T-3R3M-S	3.3	70	0.08	2.00	2.0
SSL0402T-4R7M-S	4.7	50	0.09	1.50	1.5
SSL0402T-6R8M-S	6.8	45	0.13	1.20	1.4
SSL0402T-100M-S	10	35	0.16	1.10	1.1
SSL0402T-150M-S	15	30	0.23	0.90	1.2
SSL0402T-220M-S	22	20	0.37	0.70	0.8
SSL0402T-330M-S	33	15	0.51	0.58	0.6
SSL0402T-470M-S	47	14	0.64	0.50	0.5
SSL0402T-680M-S	68	11	0.86	0.40	0.4
SSL0402T-101M-S	100	9	1.27	0.31	0.3
SSL0402T-151M-S	150	6	2.00	0.27	0.25
SSL0402T-221M-S	220	5.5	3.11	0.22	0.20
SSL0402T-331M-S	330	5	3.80	0.18	0.16
SSL0402T-471M-S	470	4	5.06	0.16	0.15
SSL0402T-681M-S	680	3	9.20	0.14	0.12
SSL0401T-102M-S	1000	2	13.8	0.10	0.07

* Inductance Tested at 0.1 Vrms, 100 KHz

** Inductance Drop = 10% Typ. at Isat.

*** ΔT = 30°C Rise Typ at Irms.

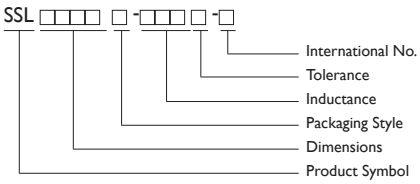
Operating Temperature Range -40°C to +85°C

FEATURES

High energy storage and very low resistance.

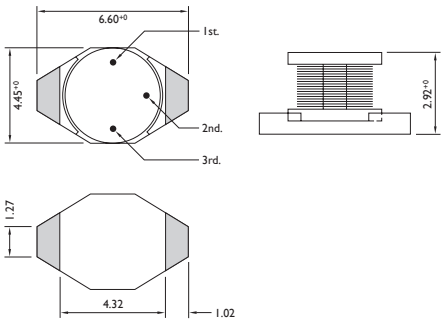
Smallest size and high performance

PRODUCT IDENTIFICATION



- Packaging: T : Tape and Reel
- Tolerance: M: ±20%
- Note: YAGEO will start to release SSL Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to "N" as identification. Ex. SSL04LP-1R2M-N

SHAPES AND DIMENSIONS



Dimensions : mm

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (nH)	TEST FREQUENCY (MHZ)	Rdc Max	Isat (A)	Irms (A)	SRF (KHz)Typ.
SSL0402T-1R0 □ -N	1	100KHz,0.1V	0.05	2.9	2.9	130
SSL0402T-1R5 □ -N	1.5	100KHz,0.1V	0.05	2.6	2.8	115
SSL0402T-2R2 □ -N	2.2	100KHz,0.1V	0.07	2.3	2.4	90
SSL0402T-3R3 □ -N	3.3	100KHz,0.1V	0.08	2	2	70
SSL0402T-4R7 □ -N	4.7	100KHz,0.1V	0.09	1.5	1.5	50
SSL0402T-5R6 □ -N	5.6	100KHz,0.1V	0.11	1.3	-	47
SSL0402T-6R8 □ -N	6.8	100KHz,0.1V	0.13	1.2	1.4	45
SSL0402T-100 □ -N	10	100KHz,0.1V	0.16	1.1	1.1	35
SSL0402T-150 □ -N	15	100KHz,0.1V	0.23	0.9	1.2	30
SSL0402T-220 □ -N	22	100KHz,0.1V	0.37	0.7	0.8	20
SSL0402T-330 □ -N	33	100KHz,0.1V	0.51	0.58	0.6	15
SSL0402T-470 □ -N	47	100KHz,0.1V	0.64	0.5	0.5	14
SSL0402T-680 □ -N	68	100KHz,0.1V	0.86	0.4	0.4	11
SSL0402T-101 □ -N	100	100KHz,0.1V	1.27	0.31	0.3	9
SSL0402T-151 □ -N	150	100KHz,0.1V	2	0.27	0.25	6
SSL0402T-221 □ -N	220	100KHz,0.1V	3.11	0.22	0.2	5.5
SSL0402T-331 □ -N	330	100KHz,0.1V	3.8	0.18	0.16	5
SSL0402T-471 □ -N	470	100KHz,0.1V	5.66	0.16	0.15	4
SSL0402T-681 □ -N	680	100KHz,0.1V	9.2	0.14	0.12	3
SSL0402T-102 □ -N	1000	100KHz,0.1V	13.8	0.1	0.07	2

NOTE : □ -tolerance M=±20%

1.Operating temperature range -40°C~85°C

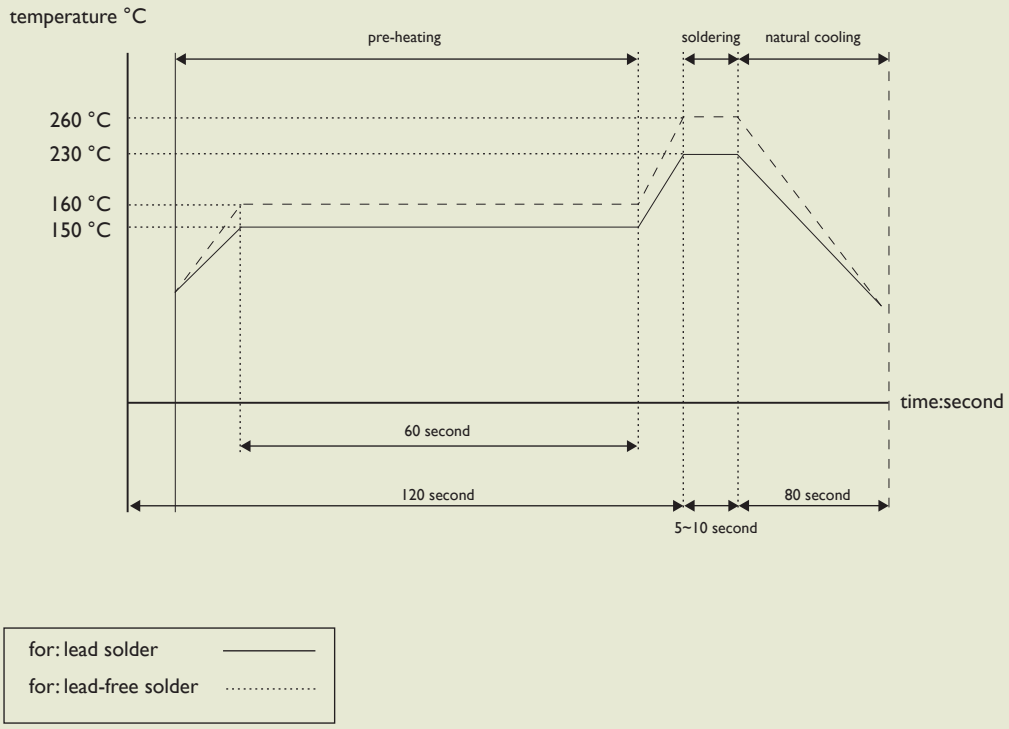
2.Inductance drop 20% typ. at last

4. ΔT=30°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



SMD Power Inductors

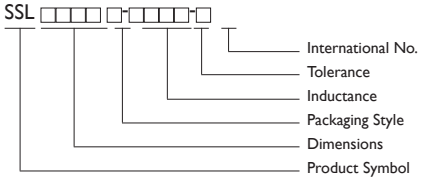
SSL0802 Series

FEATURES

High energy storage and very low resistance.

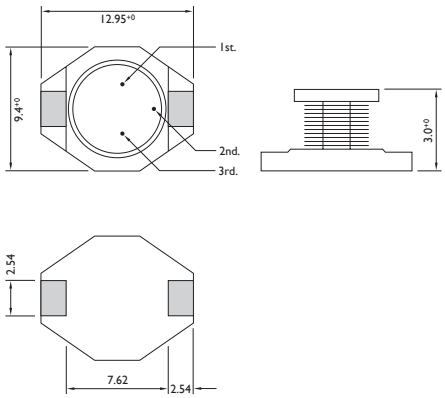
Smallest size and high performance

PRODUCT IDENTIFICATION



- Packaging: T : Tape and Reel
- Tolerance: M: ±20%
- Note: YAGEO will start to release SSL Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to "N" as identification. Ex. SSL04LP-1R2M-N

SHAPES AND DIMENSIONS



Dimensions : mm

For SSL series provide excellent current carrying capabilities in a small footprint. They have a flat top for reliable pick and place operations and features robust temperature deflection. In addition to the standard versions shown here, custom inductors are available to meet your exact requirement.

APPLICATIONS

Notebook computers, Sep-up and step-down converters

Flash, memory programmers. Etc...

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (µH ± 20%) *	SRF (MHz)	DC RESISTANCE (Ω^{+0})	Isat ** (A)	Irms *** (A)
SSL0802T-100M-S	10	35	0.09	2.4	2.0
SSL0802T-150M-S	15	33	0.12	2.0	1.5
SSL0802T-220M-S	22	25	0.19	1.6	1.3
SSL0802T-330M-S	33	19	0.25	1.4	1.1
SSL0802T-470M-S	47	14	0.32	1.0	0.8
SSL0802T-680M-S	68	12	0.55	0.9	0.7
SSL0802T-101M-S	100	10	0.7	0.7	0.6
SSL0802T-151M-S	150	8	1.0	0.6	0.5
SSL0802T-221M-S	220	6	1.6	0.5	0.4
SSL0802T-331M-S	330	5	2.2	0.4	0.3
SSL0802T-471M-S	470	4	3.3	0.3	0.2
SSL0802T-681M-S	680	3	4.4	0.2	0.1
SSL0802T-102M-S	1000	2.5	7.0	0.1	0.05

* Inductance Tested at 0.1 Vrms, 100 KHz

** Inductance Drop = 10% Typ. at Isat.

*** ΔT = 30°C Rise Typ at Irms.

Operating Temperature Range -40°C to +85°C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (nH)	TEST FREQUENCY (MHZ)	Rdc Max	Isat (A)	Irms (A)	SRF (KHz)Typ.
SSL0802T-100 □ -N	10	100KHz,0.1V	0.09	2.4	2	35
SSL0802T-150 □ -N	15	100KHz,0.1V	0.12	2	1.5	33
SSL0802T-220 □ -N	22	100KHz,0.1V	0.19	1.6	1.3	25
SSL0802T-330 □ -N	33	100KHz,0.1V	0.25	1.4	1.1	19
SSL0802T-470 □ -N	47	100KHz,0.1V	0.32	1	0.8	14
SSL0802T-680 □ -N	68	100KHz,0.1V	0.55	0.9	0.7	12
SSL0802T-101 □ -N	100	100KHz,0.1V	0.7	0.7	0.6	10
SSL0802T-151 □ -N	150	100KHz,0.1V	1	0.6	0.5	8
SSL0802T-221 □ -N	220	100KHz,0.1V	1.6	0.5	0.4	6
SSL0802T-331 □ -N	330	100KHz,0.1V	2.2	0.4	0.3	5
SSL0802T-471 □ -N	470	100KHz,0.1V	3.3	0.3	0.2	4
SSL0802T-681 □ -N	680	100KHz,0.1V	4.4	0.2	0.1	3
SSL0802T-102 □ -N	1000	100KHz,0.1V	7	0.1	0.05	2.5

NOTE : □ -tolerance M=±20%

1.Operating temperature range -40°C~85°C

2.Inductance drop 20% typ. at last

4. ΔT=30°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

SMD Power Inductors

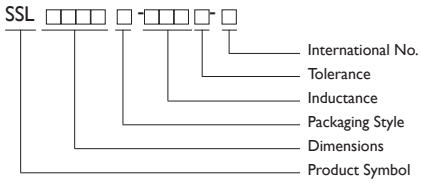
SSL0804 Series

FEATURES

High energy storage and very low resistance.

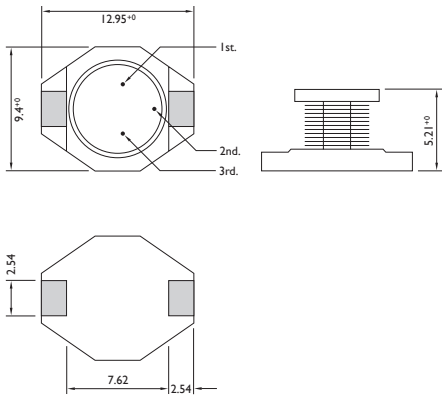
Smallest size and high performance

PRODUCT IDENTIFICATION



- Packaging: T : Tape and Reel
- Tolerance: M: ±20%
- Note: YAGEO will start to release SSL Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to "N" as identification. Ex. SSL04LP-1R2M-N

SHAPES AND DIMENSIONS



Dimensions : mm

For SSL series provide excellent current carrying capabilities in a small footprint. They have a flat top for reliable pick and place operations and features robust temperature deflection. In addition to the standard versions shown here, custom inductors are available to meet your exact requirement.

APPLICATIONS

Notebook computers, Sep-up and step-down converters

Flash, memory programmers. Etc...

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (µH ± 20%) *	SRF (MHz)	DC RESISTANCE (Ω+0) ±15%	Isat ** (A)	Irms *** (A)
SSL0804T-1R0M-S	1.0	100	0.009	9.0	6.8
SSL0804T-1R5M-S	1.5	90	0.010	8.0	6.4
SSL0804T-2R2M-S	2.2	80	0.012	7.0	6.1
SSL0804T-3R3M-S	3.3	65	0.015	6.4	5.4
SSL0804T-4R7M-S	4.7	45	0.018	5.4	4.8
SSL0804T-6R8M-S	6.8	38	0.027	4.6	4.4
SSL0804T-100M-S	10	30	0.038	3.8	3.9
SSL0804T-150M-S	15	27	0.046	3.0	3.1
SSL0804T-220M-S	22	19	0.085	2.6	2.7
SSL0804T-330M-S	33	15	0.10	2.0	2.1
SSL0804T-470M-S	47	12	0.14	1.6	1.8
SSL0804T-680M-S	68	10	0.20	1.4	1.5
SSL0804T-101M-S	100	9	0.28	1.2	1.3
SSL0804T-151M-S	150	6	0.40	1.0	1.0
SSL0804T-221M-S	220	5	0.61	0.8	0.8
SSL0804T-331M-S	330	4.5	1.02	0.6	0.6
SSL0804T-471M-S	470	3.5	1.27	0.5	0.5
SSL0804T-681M-S	680	2.5	2.02	0.4	0.4
SSL0804T-102M-S	1000	2.0	3.0	0.3	0.3

* Inductance Tested at 0.1 Vrms, 100 KHz

** Inductance Drop = 10% Typ. at Isat.

*** ΔT = 15°C Rise Typ at Irms.

Operating Temperature Range -40°C to +85°C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (nH)	TEST FREQUENCY (MHZ)	Rdc Max	Isat (A)	Irms (A)	SRF (KHz)Typ.	COLOR CODE 1st	2nd	3rd
SSL0804T-1R0 □ -N	1	100KHz,0.1V	0.009+0	9	6.8	100	BRN	BLK	RED
SSL0804T-1R5 □ -N	1.5	100KHz,0.1V	0.010+0	8	6.4	90	BRN	GRN	RED
SSL0804T-2R2 □ -N	2.2	100KHz,0.1V	0.012+0	7	6.1	80	RED	RED	RED
SSL0804T-3R3 □ -N	3.3	100KHz,0.1V	0.015+0	6.4	5.4	65	ORN	ORN	RED
SSL0804T-4R7 □ -N	4.7	100KHz,0.1V	0.018+0	5.4	4.8	45	YEL	VIO	RED
SSL0804T-6R8 □ -N	6.8	100KHz,0.1V	0.027+0	4.6	4.4	38	BLU	GRY	RED
SSL0804T-100 □ -N	10	100KHz,0.1V	0.038+0	3.8	3.9	30	BRN	BLK	ORN
SSL0804T-120 □ -N	12	100KHz,0.1V	0.0432+0	3.6	3.5	27	BRN	RED	ORN
SSL0804T-150 □ -N	15	100KHz,0.1V	0.046+0	3	3.1	27	BRN	GRN	ORN
SSL0804T-220 □ -N	22	100KHz,0.1V	0.085+0	2.6	2.7	19	RED	RED	ORN
SSL0804T-330 □ -N	33	100KHz,0.1V	0.100+0	2	2.1	15	ORN	ORN	ORN
SSL0804T-470 □ -N	47	100KHz,0.1V	0.140+0	1.6	1.8	12	YEL	VIO	ORN
SSL0804T-680 □ -N	68	100KHz,0.1V	0.200+0	1.4	1.5	10	BLU	GRY	ORN
SSL0804T-101 □ -N	100	100KHz,0.1V	0.280+0	1.2	1.3	9	BRN	BLK	YEL
SSL0804T-151 □ -N	150	100KHz,0.1V	0.400+0	1	1	6	BRN	GRN	YEL
SSL0804T-221 □ -N	220	100KHz,0.1V	0.610+0	0.8	0.8	5	RED	RED	YEL
SSL0804T-331 □ -N	330	100KHz,0.1V	1.020+0	0.6	0.6	4.5	ORN	ORN	YEL
SSL0804T-471 □ -N	470	100KHz,0.1V	1.270+0	0.5	0.5	3.5	YEL	VIO	YEL
SSL0804T-681 □ -N	680	100KHz,0.1V	2.020+0	0.4	0.4	2.5	BLU	GRY	YEL
SSL0804T-102 □ -N	1000	100KHz,0.1V	3.000+0	0.3	0.3	2	BRN	BLK	GRN

NOTE : □ -tolerance M=±20%

1.Operating temperature range -40°C~85°C

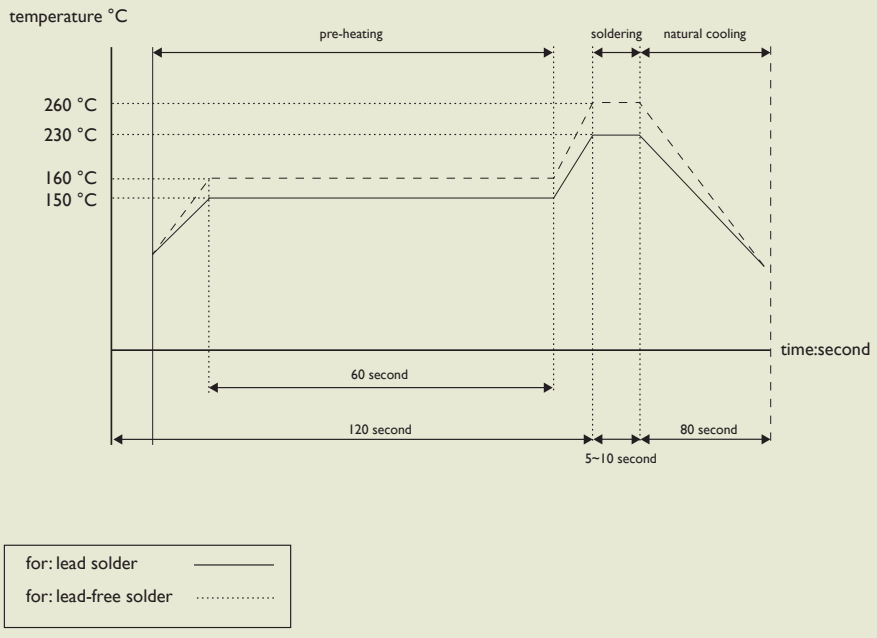
2.Inductance drop 20% typ. at last

4. ΔT=15°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



SMD Power Inductors

SSL0810 Series

For SSL series provide excellent current carrying capabilities in a small footprint. They have a flat top for reliable pick and place operations and features robust temperature deflection. In addition to the standard versions shown here, custom inductors are available to meet your exact requirement.

FEATURES

- High energy storage and very low resistance.
- Smallest size and high performance

APPLICATIONS

- Notebook computers, Sep-up and step-down converters
- Flash, memory programmers. Etc...

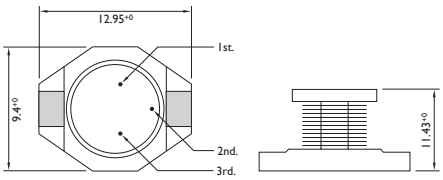
PRODUCT IDENTIFICATION

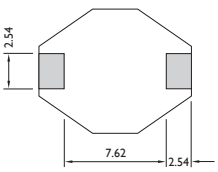
SSL □□□□ □ -□□□ □ -□

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

- Packaging: T : Tape and Reel
- Tolerance: M: ±20%
- Note: YAGEO will start to release SSL Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to "N" as identification. Ex. SSL04LP-1R2M-N

SHAPES AND DIMENSIONS





Dimensions : mm

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (µH ± 20%) *	SRF (MHz)	DC RESISTANCE (Ω^{+0})	Isat ** (A)	Irms *** (A)
SSL0810T-100M-S	10	22	0.033	8.0	3.5
SSL0810T-150M-S	15	18	0.042	7.0	3.0
SSL0810T-220M-S	22	11	0.054	5.5	2.5
SSL0810T-330M-S	33	9	0.08	4.0	2.0
SSL0810T-470M-S	47	8	0.10	3.8	1.6
SSL0810T-680M-S	68	7	0.17	3.0	1.2
SSL0810T-101M-S	100	5	0.22	2.5	1.2
SSL0810T-151M-S	150	4	0.34	2.0	0.9
SSL0810T-221M-S	220	3.5	0.44	1.6	0.7
SSL0810T-331M-S	330	2.5	0.70	1.2	0.6
SSL0810T-471M-S	470	2	0.95	1.0	0.3
SSL0810T-681M-S	680	2	1.2	1.0	0.2
SSL0810T-102M-S	1000	1.5	2.0	0.8	0.1

* Inductance Tested at 0.1 Vrms, 100 KHz

** Inductance Drop = 10% Typ. at Isat.

*** ΔT = 40°C Rise Typ at Irms.

Operating Temperature Range -40°C to +85°C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (nH)	TEST FREQUENCY (MHZ)	Rdc Max	Isat (A)	Irms (A)	SRF (KHz)Typ.
SSL0810T-4R7 □ -N	4.7	100KHz,0.1V	0.033	8	3.5	25
SSL0810T-100 □ -N	10	100KHz,0.1V	0.033	8	3.5	22
SSL0810T-150 □ -N	15	100KHz,0.1V	0.042	7	3	18
SSL0810T-220 □ -N	22	100KHz,0.1V	0.054	5.5	2.5	11
SSL0810T-330 □ -N	33	100KHz,0.1V	0.08	4	2	9
SSL0810T-470 □ -N	47	100KHz,0.1V	0.1	3.8	1.6	8
SSL0810T-680 □ -N	68	100KHz,0.1V	0.17	3	1.2	7
SSL0810T-101 □ -N	100	100KHz,0.1V	0.22	2.5	1.2	5
SSL0810T-151 □ -N	150	100KHz,0.1V	0.34	2	0.9	4
SSL0810T-221 □ -N	220	100KHz,0.1V	0.44	1.6	0.7	3.5
SSL0810T-331 □ -N	330	100KHz,0.1V	0.7	1.2	0.6	2.5
SSL0810T-471 □ -N	470	100KHz,0.1V	0.95	1	0.3	2
SSL0810T-681 □ -N	680	100KHz,0.1V	1.2	1	0.2	2
SSL0810T-102 □ -N	1000	100KHz,0.1V	2	0.8	0.1	1.5

NOTE : □ -tolerance M=±20%

1.Operating temperature range -40°C~85°C

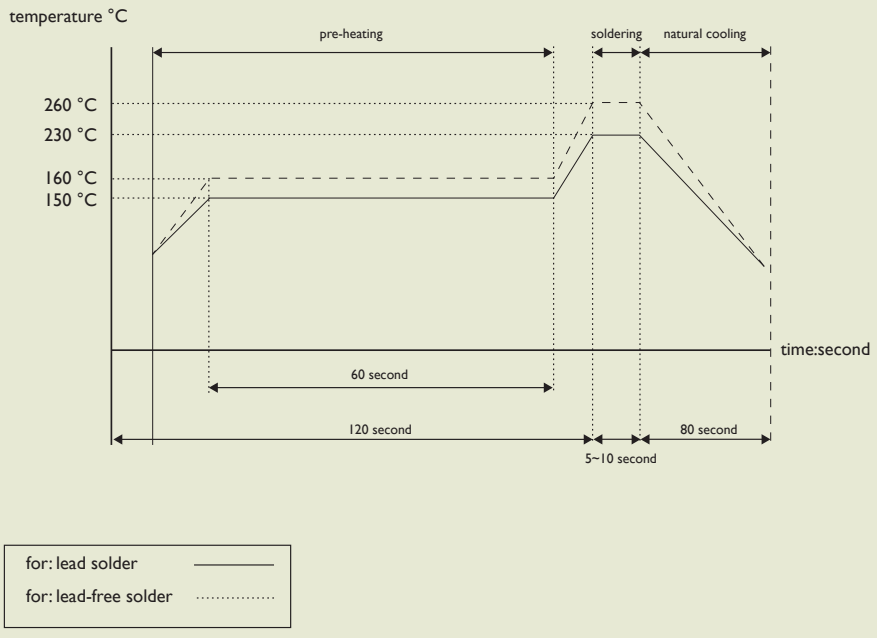
2.Inductance drop 20% typ. at last

4. ΔT=40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



SMD Power Inductors

SSL1306 Series

For SSL series provide excellent current carrying capabilities in a small footprint. They have a flat top for reliable pick and place operations and features robust temperature deflection. In addition to the standard versions shown here, custom inductors are available to meet your exact requirement.

FEATURES

High energy storage and very low resistance.

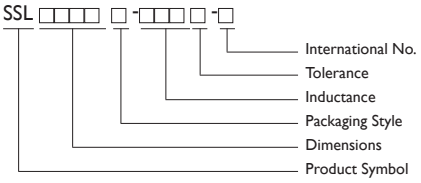
Smallest size and high performance

APPLICATIONS

Notebook computers, Sep-up and step-down converters

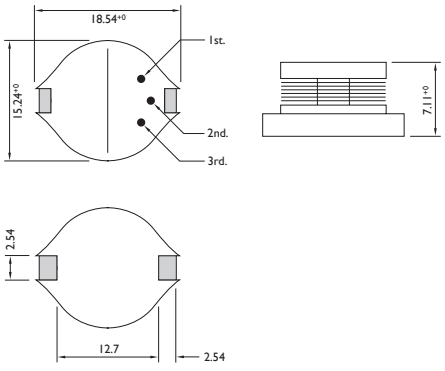
Flash, memory programmers. Etc...

PRODUCT IDENTIFICATION



- Packaging: T : Tape and Reel
- Tolerance: M: ±20%
- Note: YAGEO will start to release SSL Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to "N" as identification. Ex. SSL04LP-1R2M-N

SHAPES AND DIMENSIONS



Dimensions : mm

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (µH ± 20%) *	SRF (MHz)	DC RESISTANCE (Ω+0)	Isat ** (A)	Irms *** (A)
SSL1306T-1R0M-S	1.0	80	0.011	20	8.6
SSL1306T-2R2M-S	2.2	80	0.014	16	7.1
SSL1306T-3R3M-S	3.3	60	0.016	14	6.2
SSL1306T-5R6M-S	5.6	40	0.022	12	5.3
SSL1306T-100M-S	10	30	0.032	10	4.3
SSL1306T-150M-S	15	22	0.036	8.0	4.0
SSL1306T-220M-S	22	20	0.047	7.0	3.5
SSL1306T-330M-S	33	15	0.066	5.5	3.0
SSL1306T-470M-S	47	9	0.087	4.5	2.6
SSL1306T-680M-S	68	8	0.13	3.5	2.3
SSL1306T-101M-S	100	7	0.19	3.0	1.8
SSL1306T-151M-S	150	6	0.25	2.6	1.5
SSL1306T-221M-S	220	5	0.38	2.4	1.2
SSL1306T-331M-S	330	4	0.56	1.9	1.0
SSL1306T-471M-S	470	3	0.85	1.4	0.82
SSL1306T-681M-S	680	2.5	1.2	1.2	0.72
SSL1306T-102M-S	1000	2	1.8	1.0	0.56

* Inductance Tested at 0.1 Vrms, 100 KHz

** Inductance Drop = 10% Typ. at Isat.

*** ΔT = 40°C Rise Typ at Irms.

Operating Temperature Range -40°C to +85°C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (nH)	TEST FREQUENCY (MHZ)	Rdc (Ω)	Isat (A)	Irms (A)	SRF (KHz)Typ.
SSL1306T-1R0 □ -N	1	100KHz,0.1V	0.011+15%	20	8.6	80
SSL1306T-2R2 □ -N	2.2	100KHz,0.1V	0.014+15%	16	7.1	80
SSL1306T-3R3 □ -N	3.3	100KHz,0.1V	0.016+15%	14	6.2	60
SSL1306T-5R6 □ -N	5.6	100KHz,0.1V	0.022+15%	12	5.3	40
SSL1306T-100 □ -N	10	100KHz,0.1V	0.032+15%	10	4.3	30
SSL1306T-150 □ -N	15	100KHz,0.1V	0.036+15%	8	4	22
SSL1306T-220 □ -N	22	100KHz,0.1V	0.047+15%	7	3.5	20
SSL1306T-330 □ -N	33	100KHz,0.1V	0.066+15%	5.5	3	15
SSL1306T-470 □ -N	47	100KHz,0.1V	0.087+15%	4.5	2.6	9
SSL1306T-680 □ -N	68	100KHz,0.1V	0.13+15%	3.5	2.3	8
SSL1306T-101 □ -N	100	100KHz,0.1V	0.19+15%	3	1.8	7
SSL1306T-151 □ -N	150	100KHz,0.1V	0.25+15%	2.6	1.5	6
SSL1306T-221 □ -N	220	100KHz,0.1V	0.38+15%	2.4	1.2	5
SSL1306T-331 □ -N	330	100KHz,0.1V	0.56+15%	1.9	1	4
SSL1306T-471 □ -N	470	100KHz,0.1V	0.85+15%	1.4	0.82	3
SSL1306T-681 □ -N	680	100KHz,0.1V	1.2+15%	1.2	0.72	2.5
SSL1306T-102 □ -N	1000	100KHz,0.1V	1.8+15%	1	0.56	2

NOTE : □ -tolerance M=±20%

1.Operating temperature range -40°C~85°C

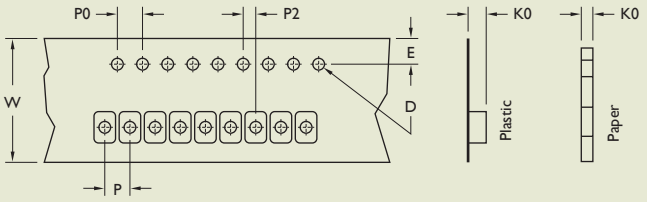
2.Inductance drop 20% typ. at last

4. ΔT=40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

TAPE DIMENSIONS

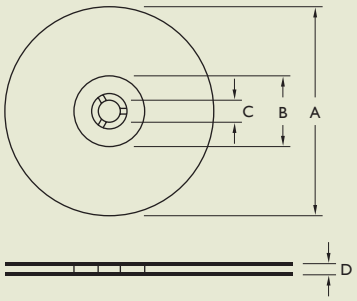
Dimensions : mm



TYPE	TAPE DIMENSIONS						
	K0	D	E	W	P	P0	P2
SSL0402	3.2	1.55	1.75	12	8	4	2
SSL0802	3.75	1.55	1.75	24	16	4	2
SSL0804	5.4	1.55	1.75	24	16	4	2
SSL0810	11.5	1.55	1.75	24	20	4	2
SSL1306	7.5	1.55	1.75	32	20	4	2

REEL DIMENSIONS

Dimensions : mm

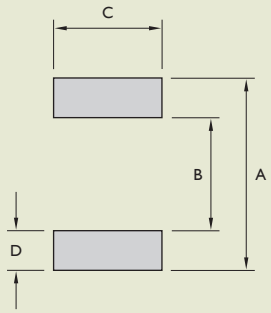


TYPE	REEL DIMENSIONS				QUANTITY /REEL	
	A	B	C	D	178	330
SSL0402	330	100	13	13.4	-	2500
	178	60		13.2	750	-
SSL0802	330	100	13	24.4	-	1000
SSL0804	330	100	13	24.4	-	750
SSL0810	330	100	13	24.4	-	225
SSL1306	330	100	13	33.4	-	250

RECOMMENDED PATTERN

Dimensions : mm

Land Pattern

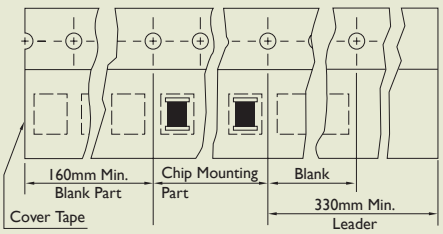


RECOMMENDED PATTERN				
	A	B	C	D
SSL0402	6.86	4.06	3.58	1.40
SSL0802	13.21	7.37	2.79	2.92
SSL0804	13.21	7.37	2.79	2.92
SSL0810	13.21	7.37	2.79	2.92
SSL1306	18.29	12.45	2.79	2.92

TAPE MATERIAL

Carrier Tape : Polystyrene

Cover Type : Polyethylene



SSL SERIES RELIABILITY TEST

1-1 MECHANICAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-1-1	Vibration	Appearance : No Damage L Change : within ±10% Q Change : within ±30% RDC : within Specification	Test device shall be soldered on the substrate. Oscillation Frequency : 10 to 55 to 10Hz for 1Min. Amplitude : 1.5mm Time : 2Hrs. for each Axis (X,Y & Z), Total 6Hrs.
1-1-2	Resistance to Soldering Heat	Appearance : No Damage	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 260 ± 5°C Immersion Time : 10 ± 1Sec.
1-1-3	Solderability	The electrodes shall be at least 90% covered with new solder coating.	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 230 ± 5°C Immersion Time : 4 ± 1Sec.

1-2 ENVIRONMENTAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-2-1	Temperature Shock	Appearance : No Damage L Change : within ±10% L Change : within ±30% RDC : within Specification	10 Cycles (Air to Air) 1 Cycles shall Consist of : 30Min. Exposure to -55°C 30Min. Exposure to 125±C 15Sec. Max. Transition between Temperatures Measured after Exposure in the Room Condition for 24Hrs.
1-2-2	Temperature Cycle		One Cycle

Step	Temperature (°C)	Time (Min.)
1	-25 ± 3	30
2	25 ± 2	3
3	85 ± 3	30
4	25 ± 2	3

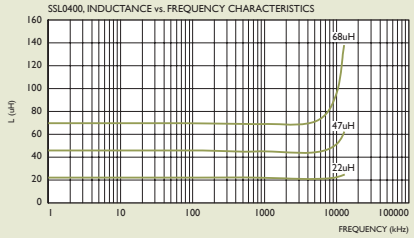
		Total : 100 Cycles Measured after Exposure in the Room Condition for 24Hrs.
1-2-3	Humidity Resistance	Temperature : 40 ± 2°C Relative Humidity : 90 ~ 95% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-4	High Temperature Resistance	Temperature : 85 ± 3°C Relative Humidity : 20% Applied Current : Rated Current Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-5	Low Temperature Resistance	Temperature : -25 ± 3°C Relative Humidity : 0% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.

TYPICAL ELECTRICAL CHARACTERISTICS

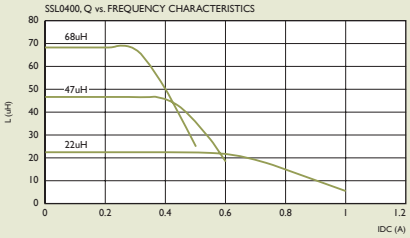
Curves of SSL Series

Test Instruments :

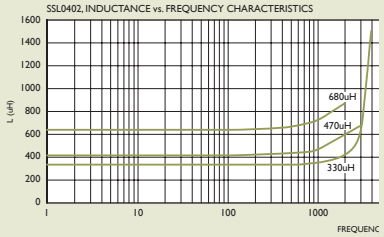
SSL0400, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



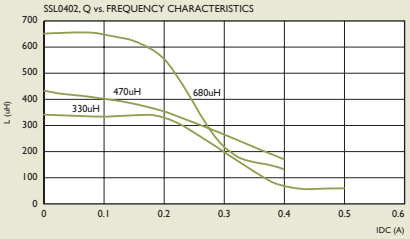
SSL0400, Q vs. FREQUENCY CHARACTERISTICS



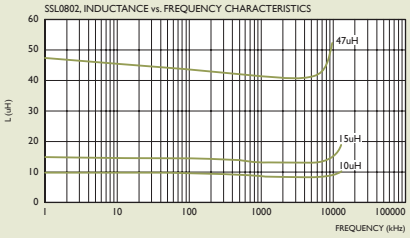
SSL0402, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



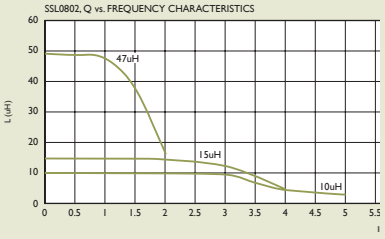
SSL0402, Q vs. FREQUENCY CHARACTERISTICS



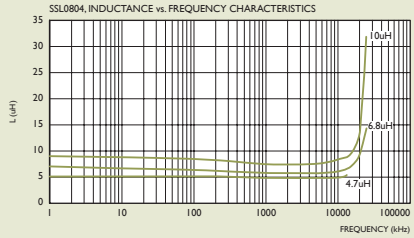
SSL0802, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



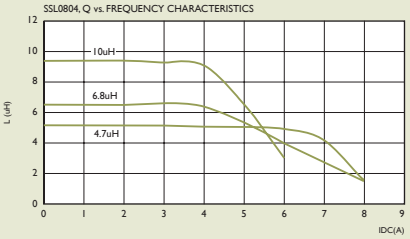
SSL0802, Q vs. FREQUENCY CHARACTERISTICS



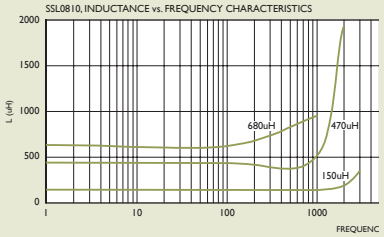
SSL0804, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



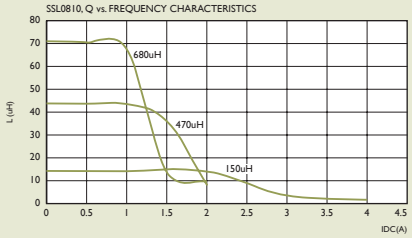
SSL0804, Q vs. FREQUENCY CHARACTERISTICS



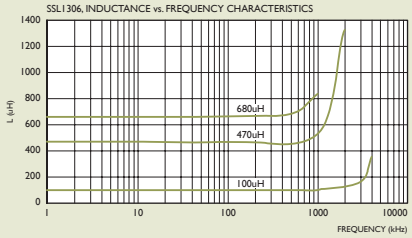
SSL0810, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



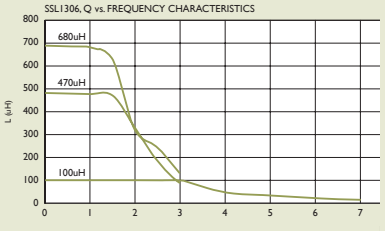
SSL0810, Q vs. FREQUENCY CHARACTERISTICS



SSL1306, INDUCTANCE vs. FREQUENCY CHARACTERISTICS

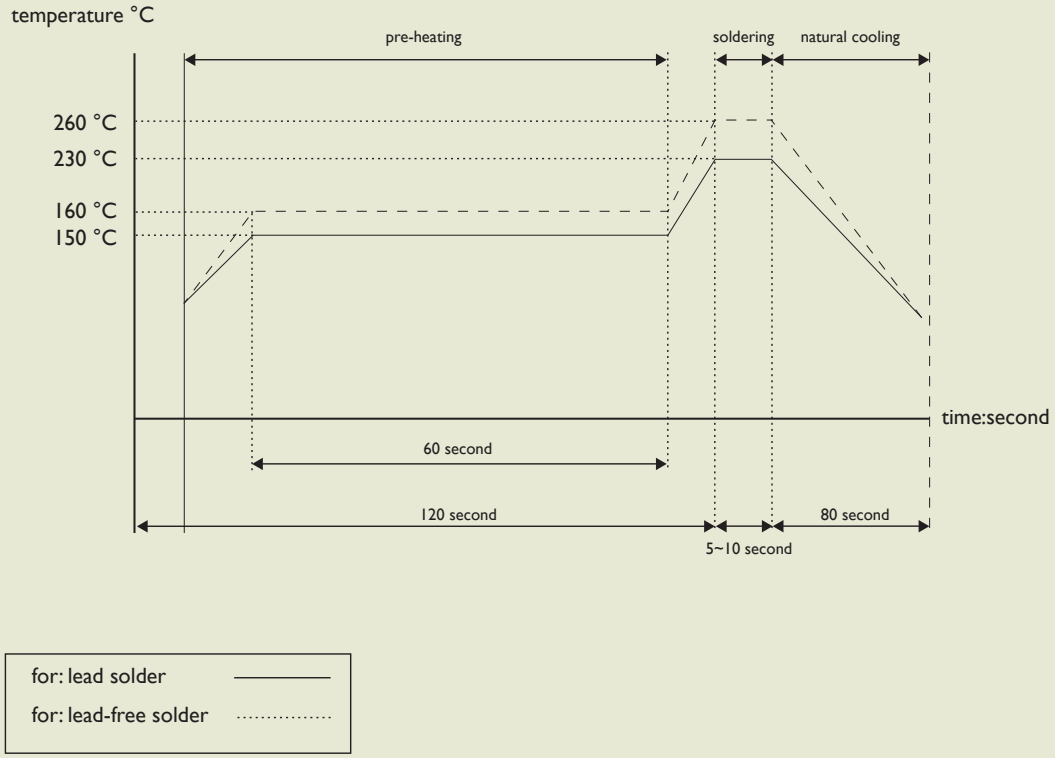


SSL1306, Q vs. FREQUENCY CHARACTERISTICS



RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



SMD Power Inductors

SSL0503HC Series

These series have been specially designed for high current, low voltage DC-DC converter applications.

This simple, rugged design provides current ratings normally available only in much larger packages - up to 16Arms for a .33µH part. With its tinned self-leaded construction, the SSL0804HC achieves very low DCR values and excellent solderability. In addition to the standard parts shown, custom values are also available.

These inductors are less than .2" (5mm) high. They have very low resistance and a rugged self-leaded construction.

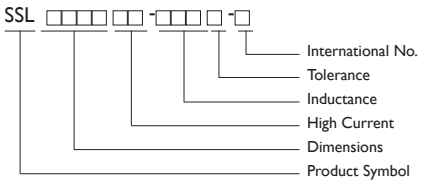
FEATURES

• For high current, low voltage DC-DC converter applications.

APPLICATIONS

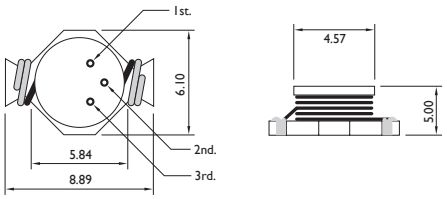
Notebook computers, Sep-up and step-down converters, memory programmers. etc...

PRODUCT IDENTIFICATION



• Packaging: T: Tape and Reel, B : Bulk
• Tolerance: M: ±20%
• Note: YAGEO will start to release SSL_HC Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to "N" as identification. Ex. SSL0503HC-R56M-N

SHAPES AND DIMENSIONS



Dimensions : mm

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (µH ± 20%) *	SRF ** (MHz)	DC RESISTANCE (Ω) Max.	Isat *** (A)	Irms **** (A)
SSL0503HC-R56M-S	0.56	200	0.010	7.7	6.0
SSL0503HC-1R2M-S	1.2	140	0.017	5.3	4.4
SSL0503HC-2R2M-S	2.2	100	0.035	3.5	3.1
SSL0503HC-4R7M-S	4.7	50	0.054	2.6	2.2
SSL0503HC-100M-S	10	40	0.111	1.9	1.5
SSL0503HC-150M-S	15	30	0.17	1.5	1.2
SSL0503HC-220M-S	22	25	0.25	1.2	1.0
SSL0503HC-330M-S	33	20	0.37	0.99	0.82
SSL0503HC-470M-S	47	15	0.47	0.87	0.72

* Inductance Tested at 0.25 Vrms, 100 KHz
** SRF measured using HP8753D network analyzer.
*** Inductance Drop = 30% Typ. at Isat.
**** ΔT = 40°C Typ at Irms.
Operating Temperature Range -40°C to +85°C
Electrical Specifications at 25°C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (nH)	TOLERANCE (±%)	Rdc (Ω)	Isat (A)	Irms (A)	SRF (KHz)Typ.
SSL0503HC-R18 □ -N	0.18	20	0.0063+0	5.5	-	330
SSL0503HC-R56 □ -N	0.56	20	0.010+0	7.7	6	200
SSL0503HC-1R2 □ -N	1.2	20	0.017+0	5.3	4.4	140
SSL0503HC-2R2 □ -N	2.2	20	0.035+0	3.5	3.1	100
SSL0503HC-4R7 □ -N	4.7	20	0.054+0	2.6	2.2	50
SSL0503HC-100 □ -N	10	20	0.111+0	1.9	1.5	40
SSL0503HC-150 □ -N	15	20	0.170+0	1.5	1.2	30
SSL0503HC-220 □ -N	22	20	0.250+0	1.2	1	25
SSL0503HC-330 □ -N	33	20	0.370+0	0.99	0.82	20
SSL0503HC-470 □ -N	47	20	0.470+0	0.87	0.72	15

NOTE : □ -tolerance M=±20% / T=±30%

1.Operating temperature range -40°C~85°C

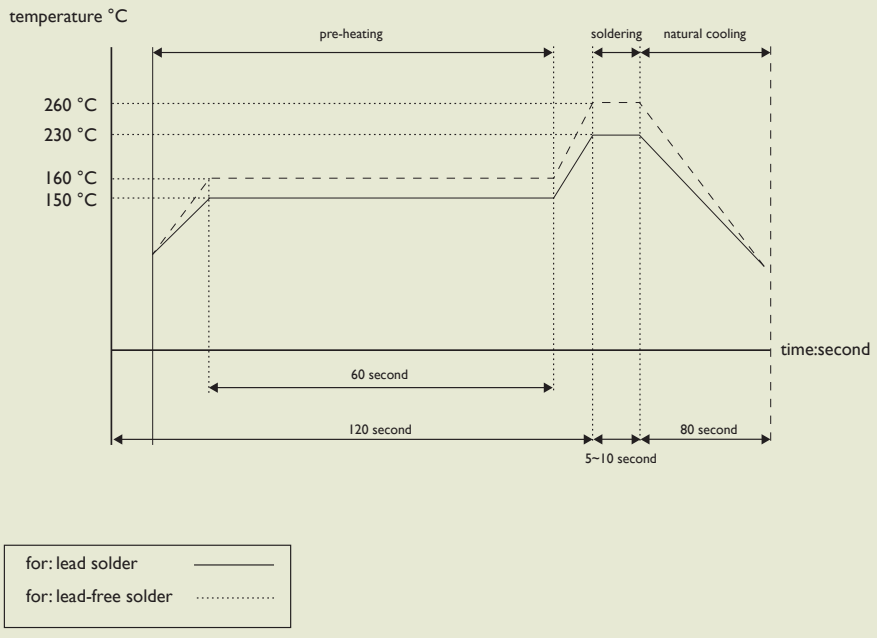
2.Inductance drop 30% typ. at last

4. ΔT=40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



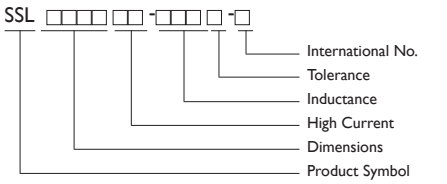
SMD Power Inductors

SSL0804HC Series

FEATURES

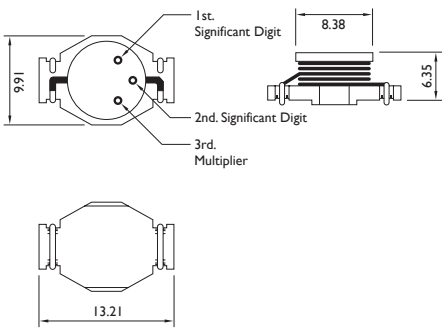
For high current, low voltage DC-DC converter applications.

PRODUCT IDENTIFICATION



- Packaging: T: Tape and Reel, B:Bulk
- Tolerance: M: ±20%
- Note: YAGEO will start to release SSL_HC Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to 'N' as identification. Ex. SSL0503HC-R56M-N

SHAPES AND DIMENSIONS



Dimensions : mm

These series have been specially designed for high current, low voltage DC-DC converter applications.

This simple, rugged design provides current ratings normally available only in much larger packages - up to 16Arms for a .33µH part. With its tinned self-leaded construction, the SSL0804HC achieves very low DCR values and excellent solderability. In addition to the standard parts shown, custom values are also available.

These inductors are less than .2" (5mm) high. They have very low resistance and a rugged self-leaded construction.

APPLICATIONS

Notebook computers, Sep-up and step-down converters, memory programmers. etc...

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (µH ± 20%) *	SRF ** (MHz)	DC RESISTANCE (Ω) Max.	Isat *** (A)	Irms **** (A)
SSL0804HC-R33M-S	0.33	300	0.002	20	16
SSL0804HC-R68M-S	0.68	200	0.005	13	12
SSL0804HC-1R0M-S	1.0	100	0.006	11	10
SSL0804HC-1R5M-S	1.5	90	0.008	9.0	9
SSL0804HC-2R2M-S	2.2	90	0.011	7.8	7.4
SSL0804HC-2R7M-S	2.7	65	0.012	7.0	6.6
SSL0804HC-3R3M-S	3.3	65	0.014	6.4	5.9
SSL0804HC-4R7M-S	4.7	45	0.018	5.4	4.8
SSL0804HC-6R8M-S	6.8	35	0.035	3.6	5.0
SSL0804HC-100M-S	10	26	0.04	3.3	4.3
SSL0804HC-150M-S	15	21	0.06	2.4	3.5
SSL0804HC-220M-S	22	17	0.08	2.0	2.8
SSL0804HC-330M-S	33	14	0.15	1.7	2.1
SSL0804HC-470M-S	47	12	0.28	1.4	1.7
SSL0804HC-680M-S	68	9	0.3	1.2	1.5
SSL0804HC-101M-S	100	7	0.4	0.95	1.2

* Inductance Tested at 0.1 Vrms, 100 KHz

** SRF measured using HP8753D network analyzer.

*** Inductance Drop = 10% Typ. at Isat.

**** ΔT = 40°C Typ at Irms.

Operating Temperature Range -40°C to +85°C

Electrical Specifications at 25°C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (nH)	TOLERANCE (±%)	Rdc (Ω)	Isat (A)	Irms (A)	SRF (KHz)Typ.
SSL0804HC-R33 □ -N	0.33	20	0.002+0	20	16	300
SSL0804HC-R68 □ -N	0.68	20	0.005+0	13	12	200
SSL0804HC-1R0 □ -N	1	20	0.006+0	11	10	100
SSL0804HC-1R5 □ -N	1.5	20	0.008+0	9	9	90
SSL0804HC-2R2 □ -N	2.2	20	0.011+0	7.8	7.4	90
SSL0804HC-2R7 □ -N	2.7	20	0.012+0	7	6.6	65
SSL0804HC-3R3 □ -N	3.3	20	0.014+0	6.4	5.9	65
SSL0804HC-4R7 □ -N	4.7	20	0.018+0	5.4	4.8	45
SSL0804HC-6R8 □ -N	6.8	20	0.035+0	3.6	5	35
SSL0804HC-100 □ -N	10	20	0.040+0	3.3	4.3	26
SSL0804HC-150 □ -N	15	20	0.060+0	2.4	3.5	21
SSL0804HC-220 □ -N	22	20	0.080+0	2	2.8	17
SSL0804HC-330 □ -N	33	20	0.150+0	1.7	2.1	14
SSL0804HC-470 □ -N	47	20	0.280+0	1.4	1.7	12
SSL0804HC-680 □ -N	68	20	0.300+0	1.2	1.5	9
SSL0804HC-101 □ -N	100	20	0.400+0	0.95	1.2	7

NOTE : □ -tolerance M=±20% / T=±30%

1.Operating temperature range -40°C~85°C

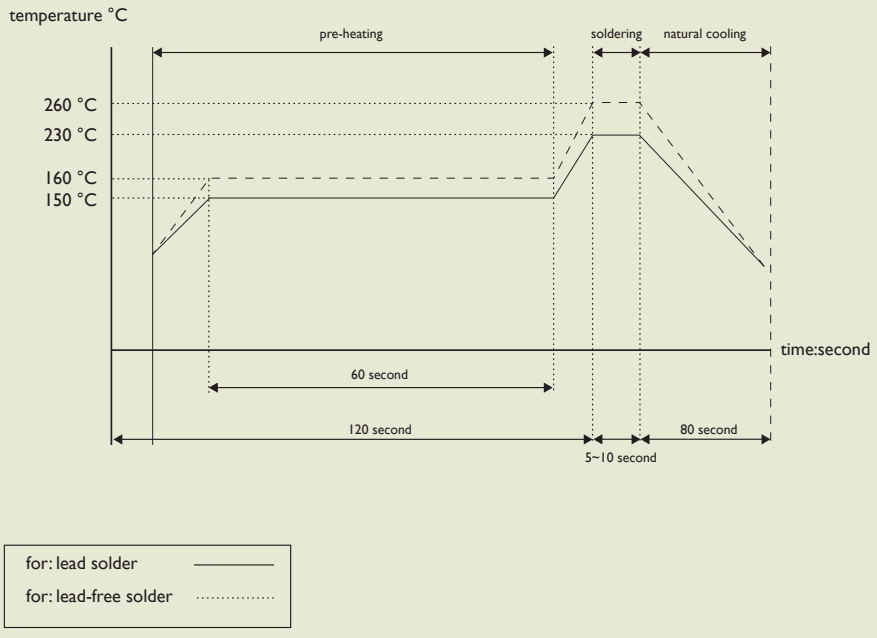
2.Inductance drop 10% typ. at last

4. ΔT=40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



SMD Power Inductors

SSL1306HC Series

FEATURES

For high current, low voltage DC-DC converter applications.

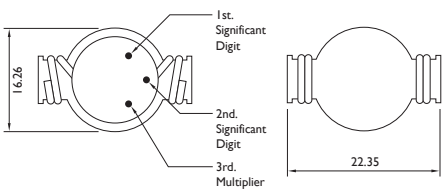
PRODUCT IDENTIFICATION

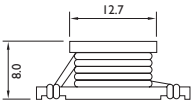
SSL □□□□ □□ -□□□ □ -□

- International No.
- Tolerance
- Inductance
- High Current
- Dimensions
- Product Symbol

- Packaging: T: Tape and Reel, B:Bulk
- Tolerance: M: ±20%
- Note: YAGEO will start to release SSL_HC Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to 'N' as identification. Ex. SSL0503HC-R56M-N

SHAPES AND DIMENSIONS





Dimensions : mm

These series have been specially designed for high current, low voltage DC-DC converter applications.

This simple, rugged design provides current ratings normally available only in much larger packages - up to 16Arms for a .33µH part. With its tinned self-leaded construction, the SSL0804HC achieves very low DCR values and excellent solderability. In addition to the standard parts shown, custom values are also available.

These inductors are less than .2' (5mm) high. They have very low resistance and a rugged self-leaded construction.

APPLICATIONS

Notebook computers, Sep-up and step-down converters, memory programmers. etc...

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (µH ± 20%) *	SRF (MHz)	DC RESISTANCE (Ω) Max.	Isat ** (A)	Irms *** (A)
SSL1306HC-R78M-S	0.78	156	2.6	30	15
SSL1306HC-1R5M-S	1.5	100	4.0	25	15
SSL1306HC-2R2M-S	2.2	75	6.1	20	12
SSL1306HC-3R3M-S	3.3	60	8.6	17	10
SSL1306HC-3R9M-S	3.9	55	10	15	9.0
SSL1306HC-4R7M-S	4.7	40	14	13	8.4
SSL1306HC-6R0M-S	6.0	35	17	12	7.5
SSL1306HC-7R8M-S	7.8	35	18	11	7.5
SSL1306HC-100M-S	10	28	26	10	6.0
SSL1306HC-150M-S	15	20	32	8	4.4

* L : Tested at 0.1 Vrms, 100 KHz (HP-4192A)

** Isat : Inductance Drop = 10% Typ.

*** ΔT = 40°C Typ at Irms.

Operating Temperature Range -40°C to +85°C

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (nH)	TOLERANCE (±%)	Rdc (Ω)	Isat (A)	Irms (A)	SRF (KHz)Typ.
SSL1306HC-R78 □ -N	0.78	20	0.0026+0	30TYP.	15	156
SSL1306HC-1R5 □ -N	1.5	20	0.0040+0	25TYP.	15	100
SSL1306HC-2R2 □ -N	2.2	20	0.0061+0	20TYP.	12	75
SSL1306HC-3R3 □ -N	3.3	20	0.0086+0	17TYP.	10	60
SSL1306HC-3R9 □ -N	3.9	20	0.0100+0	15TYP.	9	55
SSL1306HC-4R7 □ -N	4.7	20	0.0140+0	13TYP.	8.4	40
SSL1306HC-6R0 □ -N	6	20	0.0170+0	12TYP.	7.5	35
SSL1306HC-7R8 □ -N	7.8	20	0.0180+0	11TYP.	7.5	35
SSL1306HC-100 □ -N	10	20	0.0260+0	10TYP.	6	28
SSL1306HC-150 □ -N	15	20	0.0320+0	8TYP.	4.4	20

NOTE : □ -tolerance M=±20% / T=±30%

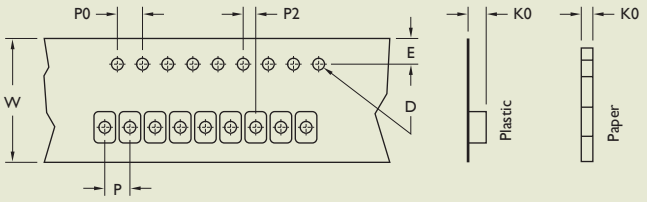
1.Operating temperature range -40°C~85°C

2.Inductance drop 10% typ. at last

3. ΔT=40°C rise typ.at Irms.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

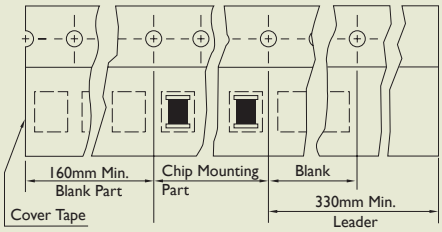
TAPE DIMENSIONS



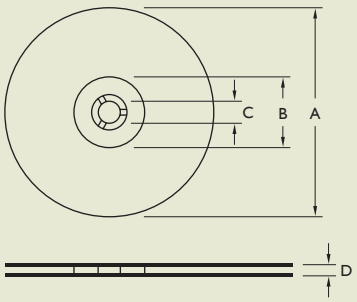
TAPE MATERIAL

Carrier Tape : Polystyrene

Cover Type : Polyethylene

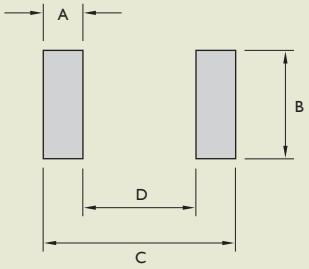


REEL DIMENSIONS



RECOMMENDED PATTERN

Land Pattern



Dimensions : mm

TYPE	TAPE DIMENSIONS							RECOMMENDED PATTERN					REEL DIMENSIONS				QUANTITY /REEL
	K0	D	E	W	P	P0	P2	UNIT	A	B	C	D	A	B	C	D	
SSL0503HC	5.3	1.55	1.75	16	12	4	2	In	0.075	0.160	0.350	0.200	330	100	13	17.4	1000
								mm	1.91	4.06	8.89	5.08					
SSL0804HC	6.1	1.55	1.75	24	16	4	2	In	0.060	0.160	0.460	0.34	330	100	13	24.2	750
								mm	1.521	4.06	11.68	8.64					
SSL1306HC	7.2	1.55	1.75	44	24	4	2	In	0.125	0.340	0.820	0.560	330	100	13	45.4	250
								mm	3.18	8.64	20.71	14.35					

SSL SERIES RELIABILITY TEST

1-1 MECHANICAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-1-1	Vibration	Appearance : No Damage L Change : within ±10% Q Change : within ±30% RDC : within Specification	Test device shall be soldered on the substrate. Oscillation Frequency : 10 to 55 to 10Hz for 1Min. Amplitude : 1.5mm Time : 2Hrs. for each Axis (X,Y & Z), Total 6Hrs.
1-1-2	Resistance to Soldering Heat	Appearance : No Damage	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 260 ± 5°C Immersion Time : 10 ± 1Sec.
1-1-3	Solderability	The electrodes shall be at least 90% covered with new solder coating.	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 230 ± 5°C Immersion Time : 4 ± 1Sec.

1-2 ENVIRONMENTAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-2-1	Temperature Shock	Appearance : No Damage L Change : within ±10% L Change : within ±30% RDC : within Specification	10 Cycles (Air to Air) 1 Cycles shall Consist of : 30Min. Exposure to -55°C 30Min. Exposure to 125°C 15Sec. Max. Transition between Temperatures Measured after Exposure in the Room Condition for 24Hrs.
1-2-2	Temperature Cycle		One Cycle

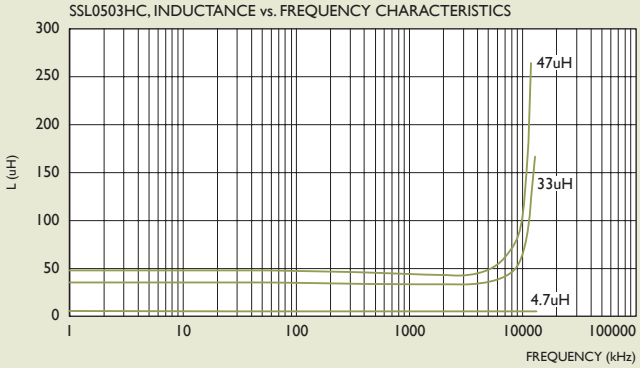
Step	Temperature (ΔC)	Time (Min.)
1	-25 ± 3	30
2	25 ± 2	3
3	85 ± 3	30
4	25 ± 2	3

			Total : 100 Cycles Measured after Exposure in the Room Condition for 24Hrs.
1-2-3	Humidity Resistance		Temperature : 40 ± 2°C Relative Humidity : 90 ~ 95% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-4	High Temperature Resistance		Temperature : 85 ± 3°C Relative Humidity : 20% Applied Current : Rated Current Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-5	Low Temperature Resistance		Temperature : -25 ± 3°C Relative Humidity : 0% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.

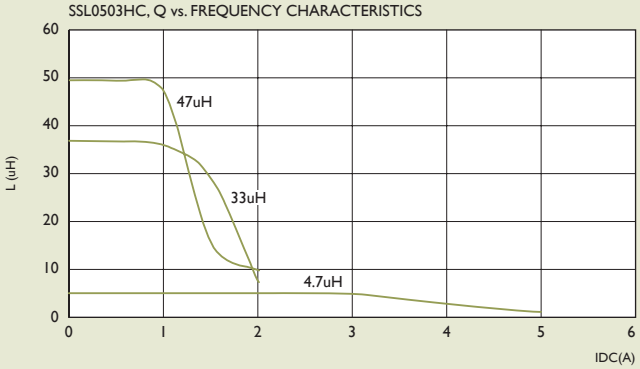
TYPICAL ELECTRICAL CHARACTERISTICS

Curves of SSL Series

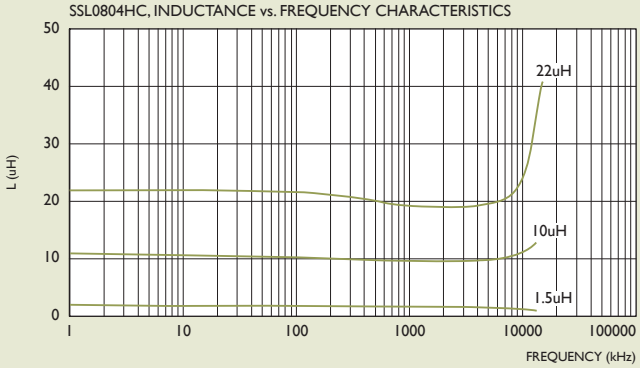
SSL0503HC, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



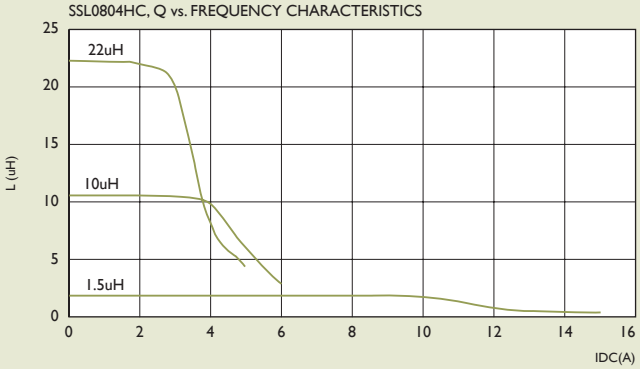
SSL0503HC, Q vs. FREQUENCY CHARACTERISTICS



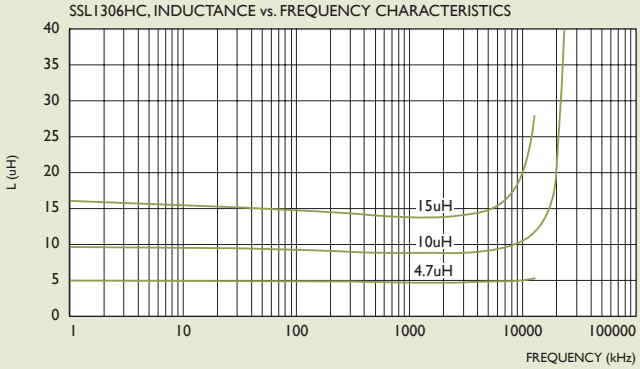
SSL0804HC, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



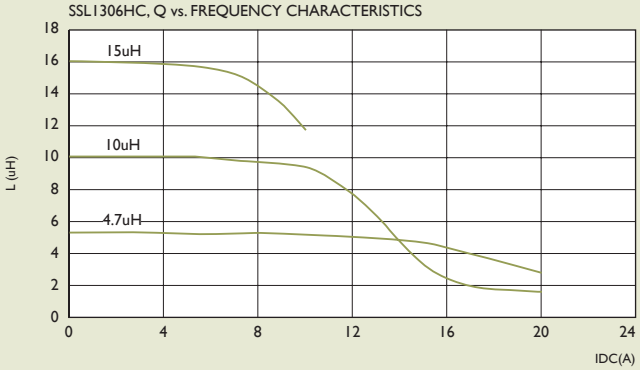
SSL0804HC, Q vs. FREQUENCY CHARACTERISTICS



SSL1306HC, INDUCTANCE vs. FREQUENCY CHARACTERISTICS

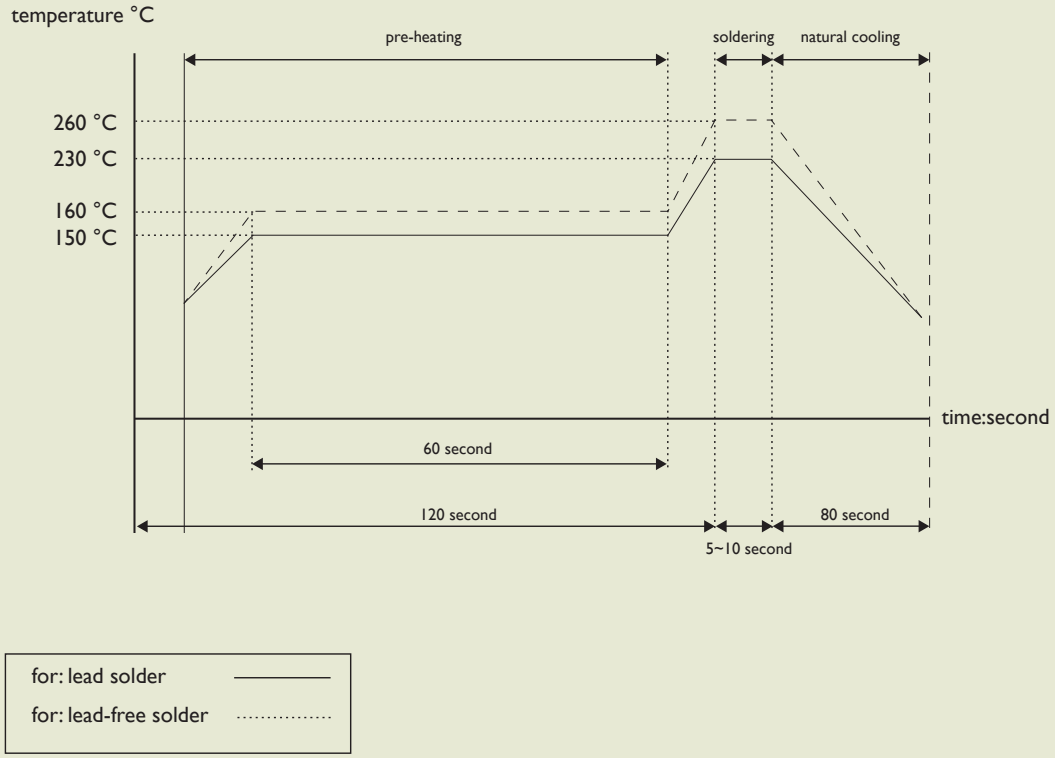


SSL1306HC, Q vs. FREQUENCY CHARACTERISTICS



RECOMMEND SOLDERING CONDITIONS

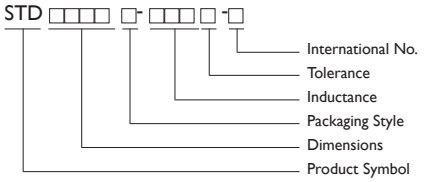
for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



SMD Power Inductors

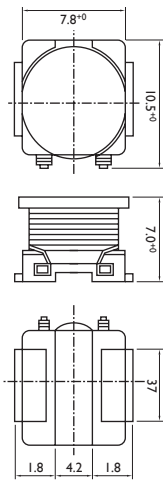
STD0804 Series

PRODUCT IDENTIFICATION



- Packaging: T: Tape and Reel
- Tolerance: M=±20%
- Note: YAGEO will start to release STD Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to "N" as identification. Ex. STD0804T-100M-B-N

SHAPES AND DIMENSIONS



Dimensions : mm

Yageo SMD power inductors are best designed for noise / EMI / RFI filters for surface mounting applications.

These components contain tremendous electrode straight, solder heat resistance and outstanding solderability. These products are specially designed for flow, reflow and wave soldering required for surface mounting applications.

APPLICATIONS

Power supply, power amplifiers

Switching regulators.

FEATURES

For high current applications.

Specially designed for high density surface applications.

Ideal for solder flow, reflow and wave soldering applications.

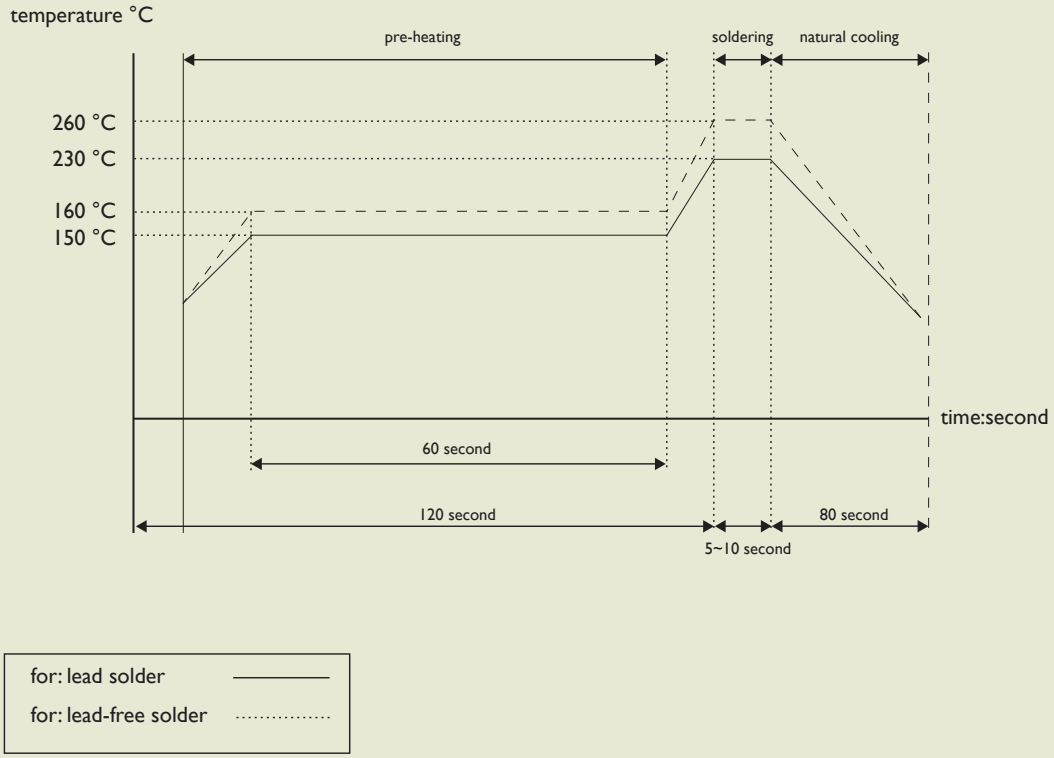
ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE * (µH ± 10%)	DC RESISTANCE (Ω^{+0})	RATED CURRENT (mA)
STD0804T-560K-S	56	0.25	900
STD0804T-680K-S	68	0.30	800
STD0804T-820K-S	82	0.37	700
STD0804T-101K-S	100	0.38	600
STD0804T-121K-S	120	0.58	550
STD0804T-151K-S	150	0.72	500
STD0804T-181K-S	180	0.80	450
STD0804T-221K-S	220	0.83	400
STD0804T-271K-S	270	1.10	350
STD0804T-331K-S	330	1.15	300

* Tested at HP4263A 1KHz, 1 Volt.
** Inductance Drop = 10% Typ. at Rated Isat.
Operating Temperature Range -40°C to +85°C

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



SMD Power Inductors

STD1109 Series

FEATURES

Power supply, power amplifiers

Switching regulators.

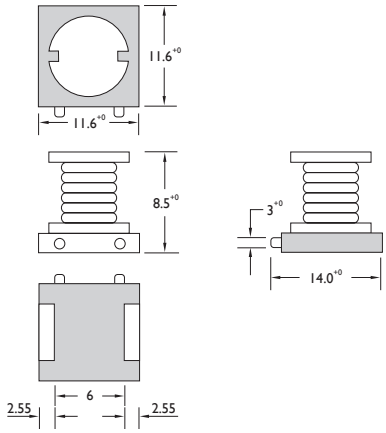
PRODUCT IDENTIFICATION

STD □□□□ □ -□□□□ □ -□

- International No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

- Packaging: T: Tape and Reel
- Tolerance: M=±20%
- Note: YAGEO will start to release STD Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to "N" as identification. Ex. STD1109T-100M-B-N

SHAPES AND DIMENSIONS



Dimensions : mm

Yageo SMD power inductors are best designed for noise / EMI / RFI filters for surface mounting applications.

These components contain tremendous electrode straight, solder heat resistance and outstanding solderability. These products are specially designed for flow, reflow and wave soldering required for surface mounting applications.

APPLICATIONS

For high current applications.

Specially designed for high density surface applications.

Ideal for solder flow, reflow and wave soldering applications.

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (μH± 20%) *	DC RESISTANCE (Ω)	RATED CURRENT (A) Max.
STD1109T-100M-B-S	10	0.06	3.50
STD1109T-120M-B-S	12	0.07	3.40
STD1109T-150M-B-S	15	0.08	3.10
STD1109T-180M-B-S	18	0.09	3.00
STD1109T-220M-B-S	22	0.10	2.60
STD1109T-270M-B-S	27	0.11	2.40
STD1109T-330M-B-S	33	0.12	2.30
STD1109T-390M-B-S	39	0.14	2.10
STD1109T-470M-B-S	47	0.17	1.95
STD1109T-560M-B-S	56	0.19	1.85
STD1109T-680M-B-S	68	0.22	1.65
STD1109T-820M-B-S	82	0.25	1.50
STD1109T-101M-B-S	100	0.35	1.40
STD1109T-121M-B-S	120	0.40	1.30
STD1109T-151M-B-S	150	0.47	1.20
STD1109T-181M-B-S	180	0.63	1.00
STD1109T-221M-B-S	220	0.73	0.95
STD1109T-271M-B-S	270	0.97	0.90
STD1109T-331M-B-S	330	1.15	0.80
STD1109T-391M-B-S	390	1.30	0.75
STD1109T-471M-B-S	470	1.48	0.65
STD1109T-561M-B-S	560	1.90	0.60
STD1109T-681M-B-S	680	2.45	0.50
STD1109T-821M-B-S	820	2.55	0.48
STD1109T-102M-B-S	1000	3.00	0.46
STD1109T-122M-B-S	1200	3.50	0.35

Test Instruments : HP4261 RF Impedance for L, IDC Digital Multimeter SC-7401 for RDC

* Test at HP4263A 1KHz, 1Volt

ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (nH±20%)	TEST FREQ (MHZ)	Rdc (Ω)Max	IDC (A)Max.
STD1109T-100 □ -B-N	10	1KHz, 1V	0.06	3.5
STD1109T-120 □ -B-N	12	1KHz, 1V	0.07	3.4
STD1109T-150 □ -B-N	15	1KHz, 1V	0.08	3.1
STD1109T-180 □ -B-N	18	1KHz, 1V	0.09	3
STD1109T-220 □ -B-N	22	1KHz, 1V	0.1	2.6
STD1109T-270 □ -B-N	27	1KHz, 1V	0.11	2.4
STD1109T-330 □ -B-N	33	1KHz, 1V	0.12	2.3
STD1109T-390 □ -B-N	39	1KHz, 1V	0.14	2.1
STD1109T-470 □ -B-N	47	1KHz, 1V	0.17	1.95
STD1109T-560 □ -B-N	56	1KHz, 1V	0.19	1.85
STD1109T-590 □ -B-N	68	1KHz, 1V	0.22	1.65
STD1109T-820 □ -B-N	82	1KHz, 1V	0.25	1.5
STD1109T-101 □ -B-N	100	1KHz, 1V	0.35	1.4
STD1109T-121 □ -B-N	120	1KHz, 1V	0.4	1.3
STD1109T-151 □ -B-N	150	1KHz, 1V	0.47	1.2
STD1109T-181 □ -B-N	180	1KHz, 1V	0.63	1
STD1109T-221 □ -B-N	220	1KHz, 1V	0.73	0.95
STD1109T-271 □ -B-N	270	1KHz, 1V	0.97	0.9
STD1109T-331 □ -B-N	330	1KHz, 1V	1.15	0.8
STD1109T-391 □ -B-N	390	1KHz, 1V	1.3	0.75
STD1109T-471 □ -B-N	470	1KHz, 1V	1.48	0.65
STD1109T-561 □ -B-N	560	1KHz, 1V	1.9	0.6
STD1109T-681 □ -B-N	680	1KHz, 1V	2.45	0.5
STD1109T-821 □ -B-N	820	1KHz, 1V	2.55	0.48
STD1109T-102 □ -B-N	1000	1KHz, 1V	3	0.46
STD1109T-122 □ -B-N	1200	1KHz, 1V	3.5	0.35

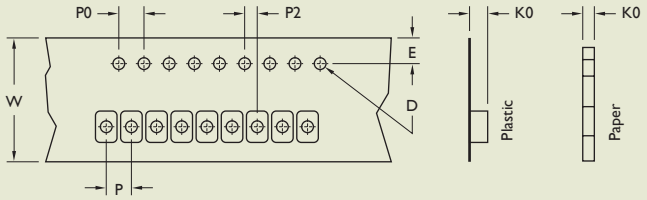
NOTE : □ -tolerance M=±20% / T=±30%

1.Operating temperature range -40°C~85°C

3.Inductance drop =10% typ.

"-N"FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

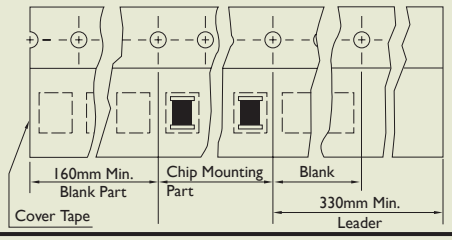
TAPE DIMENSIONS



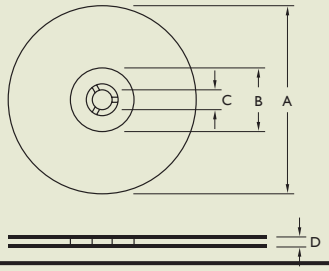
TAPE MATERIAL

Carrier Tape : Polystyrene

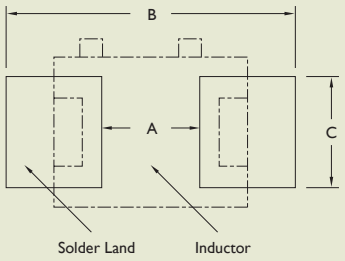
Cover Type : Polyethylene



REEL DIMENSIONS



RECOMMENDED PATTERN

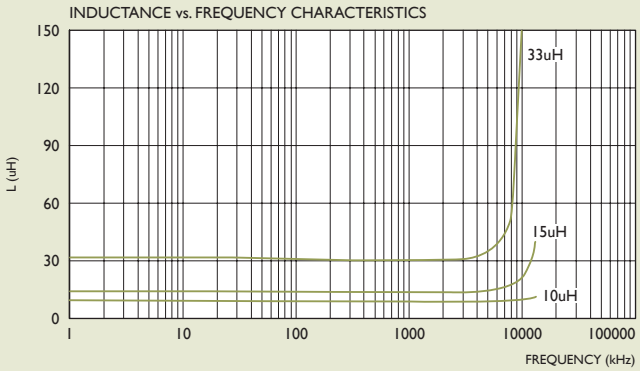


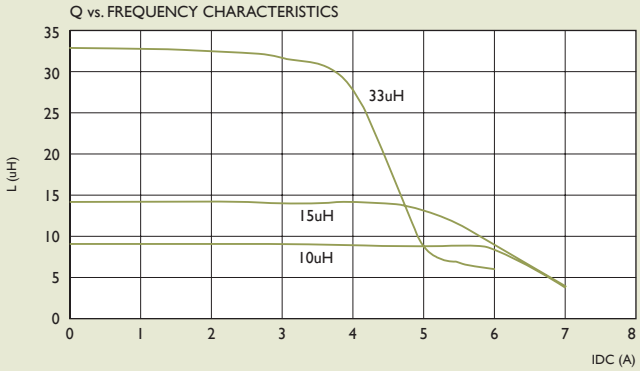
Dimensions : mm

TYPE	TAPE DIMENSIONS							RECOMMENDED PATTERN			REEL DIMENSIONS				QUANTITY /REEL
	K0	D	E	W	P	P0	P2	A	B	C	A	B	C	D	
STD0804	5.4	1.55	1.75	24	16	4	2	4.0	9	4.5	330	100	13	24.4	750
STD1109	8.7	1.55	1.75	24	20	4	2	6	12~14	5	330	100	13	24.4	400

TYPICAL INDUCTANCE ENERGY STORAGE VS. CURRENT

Test instruments : HP4191A RF Impedance Analyzer





STD SERIES RELIABILITY TEST

1-1 MECHANICAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-1-1	Vibration	Appearance : No Damage L Change : within ±10% Q Change : within ±30% RDC : within Specification	Test device shall be soldered on the substrate. Oscillation Frequency : 10 to 55 to 10Hz for 1Min. Amplitude : 1.5mm Time : 2Hrs. for each Axis (X,Y & Z), Total 6Hrs.
1-1-2	Resistance to Soldering Heat	Appearance : No Damage	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 260 ± 5°C Immersion Time : 10 ± 1Sec.
1-1-3	Solderability	The electrodes shall be at least 90% covered with new solder coating.	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 230 ± 5°C Immersion Time : 4 ± 1Sec.

1-2 ENVIRONMENTAL PERFORMANCE

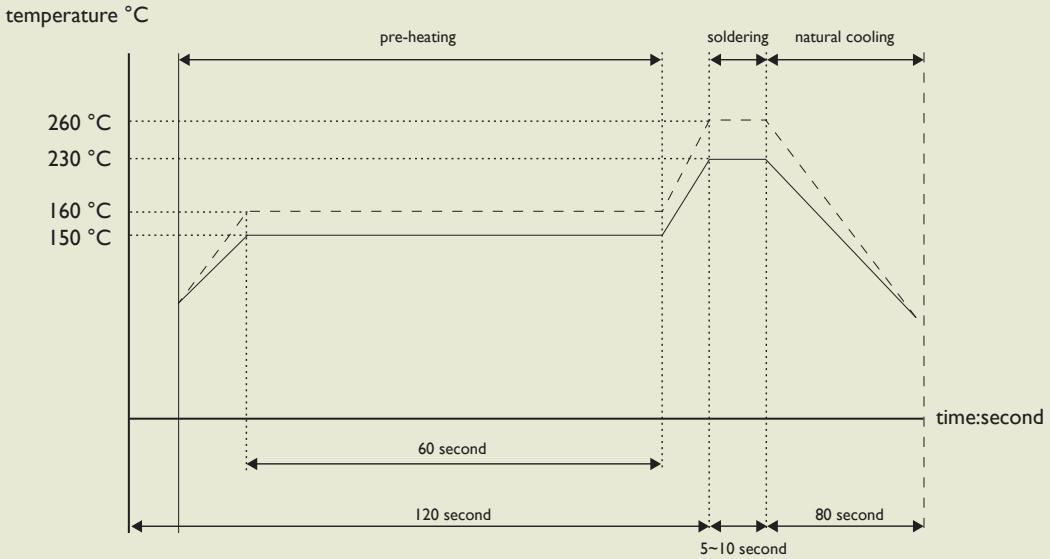
NO.	ITEM	SPECIFICATION	TEST CONDITIONS
1-2-1	Temperature Shock	Appearance : No Damage L Change : within ±10% L Change : within ±30% RDC : within Specification	10 Cycles (Air to Air) 1 Cycles shall Consist of : 30Min. Exposure to -55°C 30Min. Exposure to 125°C 15Sec. Max. Transition between Temperatures Measured after Exposure in the Room Condition for 24Hrs.
1-2-2	Temperature Cycle		One Cycle

Step	Temperature (°C)	Time (Min.)
1	-25 ± 3	30
2	25 ± 2	3
3	85 ± 3	30
4	25 ± 2	3

		Total : 100 Cycles Measured after Exposure in the Room Condition for 24Hrs.
1-2-3	Humidity Resistance	Temperature : 40 ± 2°C Relative Humidity : 90 ~ 95% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-4	High Temperature Resistance	Temperature : 85 ± 3°C Relative Humidity : 20% Applied Current : Rated Current Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.
1-2-5	Low Temperature Resistance	Temperature : -25 ± 3°C Relative Humidity : 0% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.

RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters,Transformers, Current Sensors



for: lead solder ——————

for: lead-free solder ·····