

SMD Inductor(Coils)(TDK)

For signal line(wound)

NLV Series NLV25

Conformity to RoHS Directive

FEATURES

- The product has good heat durability that withstands lead-free compatible reflow soldering conditions.
- Lead-free material is used for the plating on the terminal.
- The electrical characteristic, reliability, shape and pad shape are the same as the previous NL series.
- The product use metal terminal, which realize excellent connection reliability.
- Highly heat resistant thermoplastic resin is used to form the exterior package.
- From 0.01uH to 100uH, all of the products in the E-12 series are J($\pm 5\%$) tolerance products.
- This products are conforms to the standards that are slated to be introduced under the RoHS directive.
- This is a renewed version of NL252018.

Applications

- Audio-visual equipment including TVs, VCRs and digital cameras.
- Electronic equipment uses in communications infrastructures including xDSL and mobile based stations.
- Electronic equipment used in onboard automobile equipment including car audio and ECU systems.
- Other electronic equipment including HDDs and ODDs.

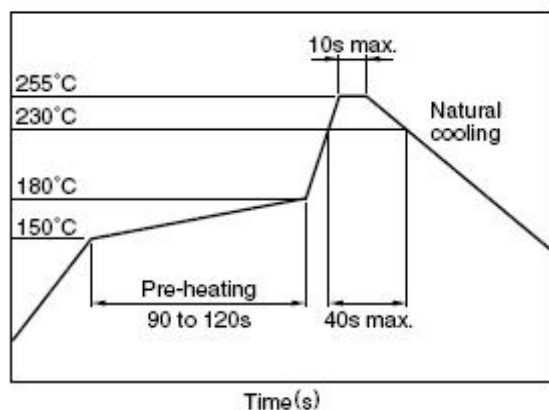
Specifications

Operating Temp range -40~+105°C (self-Temp. rise included)

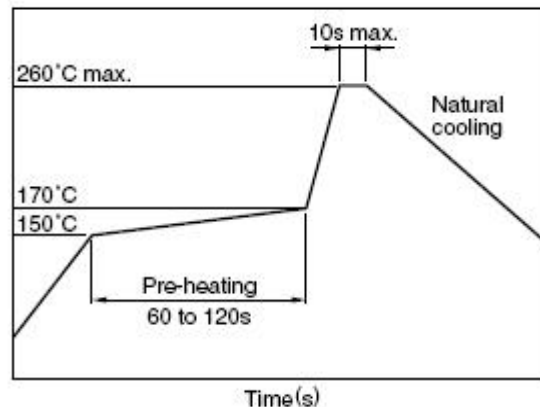
Storage Temp range -40~+105°C

Recommended soldering conditions

Reflow soldering



Reflow soldering



Iron soldering

Tip temperature 300 to 350°C

Heating time 3 second/soldering

Soldering iron specifications Output: 30W Tip diameter: 1mm

- Based on the above conditions, use a maximum product temperature of 260°C and a maximum accumulated heating time of 10 seconds as a guideline.
- Please contact us for details.

Product Identification

NLV	25	T-	2R2	J	-PF
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

25 2.5×2.0×1.8 mm (L×W×T)

(3) Packaging style

T Taping (reel)

(4) Inductance value

010 0.01uH

R10 0.1uH

1R0 1uH

100 10uH

101 100uH

(5) Inductance tolerance

J $\pm 5\%$

(6) Lead-free compatible product

PF Lead-free compatible product

Packaging style and quantities

Packaging style quantities

Taping 2000 pieces/reel

Shapes and dimensions/Recommended PC board pattern



Electrical characteristics

Inductance uH	Inductance tolerance	Q typ.	Test frequency L,Q (MHz)	self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current* (mA)max.	Part No.
0.01	±5%	15	100	2150	0.26	530	NLV25T-010J-PF
0.012	±5%	15	100	2050	0.27	500	NLV25T-012J-PF
0.015	±5%	15	100	2000	0.29	480	NLV25T-015J-PF
0.018	±5%	15	100	1850	0.31	450	NLV25T-018J-PF
0.022	±5%	15	100	1650	0.37	420	NLV25T-022J-PF
0.027	±5%	15	100	1550	0.4	410	NLV25T-027J-PF
0.033	±5%	20	100	1450	0.42	400	NLV25T-033J-PF
0.039	±5%	20	100	1350	0.45	380	NLV25T-039J-PF
0.047	±5%	20	100	1200	0.50	360	NLV25T-047J-PF
0.056	±5%	20	100	1100	0.60	340	NLV25T-056J-PF
0.068	±5%	20	100	1050	0.65	320	NLV25T-068J-PF
0.082	±5%	20	100	900	0.75	300	NLV25T-082J-PF
0.1	±5%	20	100	800	0.8	280	NLV25T-R10J-PF
0.12	±5%	30	25.2	700	0.3	550	NLV25T-R12J-PF
0.15	±5%	30	25.2	550	0.35	500	NLV25T-R15J-PF
0.18	±5%	30	25.2	500	0.4	460	NLV25T-R18J-PF
0.22	±5%	30	25.2	450	0.5	430	NLV25T-R22J-PF
0.27	±5%	30	25.2	425	0.55	420	NLV25T-R27J-PF
0.33	±5%	30	25.2	400	0.6	400	NLV25T-R33J-PF
0.39	±5%	30	25.2	375	0.65	375	NLV25T-R39J-PF
0.47	±5%	30	25.2	350	0.68	350	NLV25T-R47J-PF
0.56	±5%	30	25.2	325	0.75	325	NLV25T-R56J-PF
0.68	±5%	30	25.2	300	0.85	300	NLV25T-R68J-PF
0.82	±5%	30	25.2	260	1	260	NLV25T-R82J-PF
1	±5%	30	7.96	245	1.1	245	NLV25T-1R0J-PF
1.2	±5%	30	7.96	230	1.2	230	NLV25T-1R2J-PF
1.5	±5%	30	7.96	182	1.3	220	NLV25T-1R5J-PF
1.8	±5%	30	7.96	135	1.45	210	NLV25T-1R8J-PF
2.2	±5%	30	7.96	105	1.55	200	NLV25T-2R2J-PF
2.7	±5%	30	7.96	70	1.7	195	NLV25T-2R7J-PF
3.3	±5%	30	7.96	55	1.9	185	NLV25T-3R3J-PF
3.9	±5%	30	7.96	48	2.1	180	NLV25T-3R9J-PF
4.7	±5%	30	7.96	43	2.3	175	NLV25T-4R7J-PF
5.6	±5%	25	7.96	42	2.5	170	NLV25T-5R6J-PF
6.8	±5%	25	7.96	39	2.7	165	NLV25T-6R8J-PF
8.2	±5%	25	7.96	36	3.05	160	NLV25T-8R2J-PF
10	±5%	25	2.52	33	3.5	155	NLV25T-100J-PF
12	±5%	25	2.52	30	3.8	150	NLV25T-120J-PF
15	±5%	25	2.52	26	4.4	140	NLV25T-150J-PF

Inductance uH	Inductance tolerance	Q typ.	Test frequency L,Q (MHz)	self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current* (mA)max.	Part No.
18	±5%	25	2.52	24	4.8	130	NLV25T-180J-PF
22	±5%	25	2.52	22	5.5	125	NLV25T-220J-PF
27	±5%	25	2.52	21	6.3	115	NLV25T-270J-PF
33	±5%	25	2.52	20	7.1	110	NLV25T-330J-PF
39	±5%	20	2.52	18	9.5	90	NLV25T-390J-PF
47	±5%	20	2.52	17	11.1	80	NLV25T-470J-PF
56	±5%	20	2.52	16	12.1	75	NLV25T-560J-PF
68	±5%	20	2.52	15	16.6	70	NLV25T-680J-PF
82	±5%	20	2.52	13	19	66	NLV25T-820J-PF
100	±5%	15	0.796	12	21	60	NLV25T-101J-PF

SMD Inductor(Coils)(TDK)

For signal line(wound)

NLV Series NLV32

Conformity to RoHS Directive

FEATURES

- The product has good heat durability that withstands lead-free compatible reflow soldering conditions.
- Lead-free material is used for the plating on the terminal.
- The electrical characteristic, reliability, shape and pad shape are the same as the previous NL series.
- The product use metal terminal, which realize excellent connection reliability.
- Highly heat resistant thermoplastic resin is used to form the exterior package.
- From 0.01uH to 470uH, all of the products in the E-12 series are J($\pm 5\%$) tolerance products.
- This products are conforms to the standards that are slated to be introduced under the RoHS directive.
- This is a renewed version of NL322522.

Applications

- Audio-visual equipment including TVs, VCRs and digital cameras.
- Electronic equipment uses in communications infrastructures including xDSL and mobile based stations.
- Electronic equipment used in onboard automobile equipment including car audio and ECU systems.
- Other electronic equipment including HDDs and ODDs.

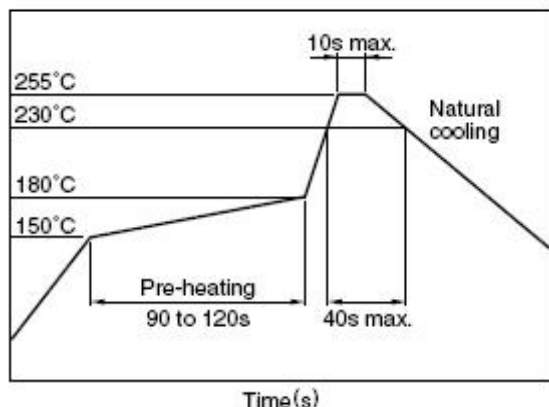
Specifications

Operating Temp range -40~+105°C (self-Temp. rise included)

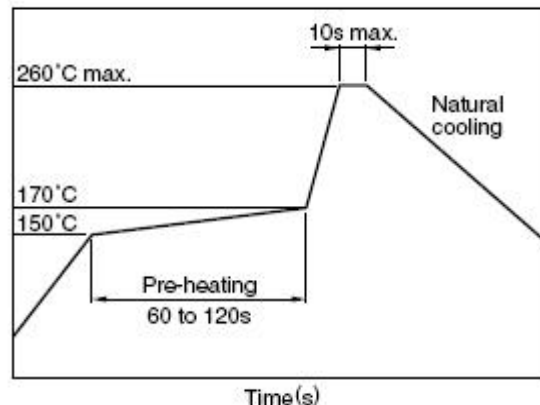
Storage Temp range -40~+105°C

Recommended soldering conditions

Reflow soldering



Reflow soldering



Iron soldering

Tip temperature 300 to 350 °C

Heating time 3 second/soldering

Soldering iron specifications Output: 30W Tip diameter: 1mm

- Based on the above conditions, use a maximum product temperature of 260°C and a maximum accumulated heating time of 10 seconds as a guideline.
- Please contact us for details.

Product Identification

NLV	32	T-	2R2	J	-PF
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

32 3.2×2.5×2.2 mm (L×W×T)

(3) Packaging style

T Taping (reel)

(4) Inductance value

010 0.01uH

R10 0.1uH

1R0 1uH

100 10uH

101 100uH

(5) Inductance tolerance

J $\pm 5\%$

(6) Lead-free compatible product

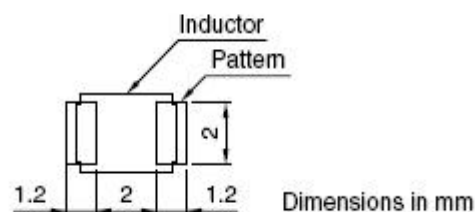
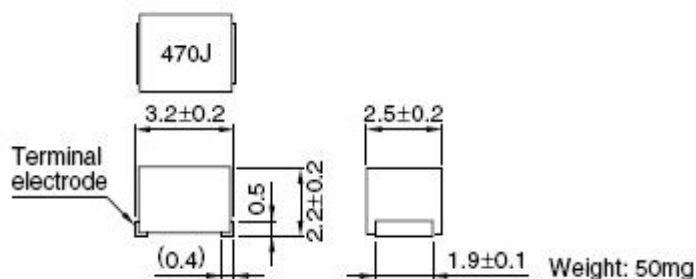
PF Lead-free compatible product

Packaging style and quantities

Packaging style quantities

Taping 2000 pieces/reel

Shapes and dimensions/Recommended PC board pattern



Electrical characteristics

Inductance uH	Inductance tolerance	Q typ.	Test frequency (MHz)	L, Q self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current* (mA)max.	Part No.
0.01	±5%	15	100	2500	0.13	450	NLV32T-010J-PF
0.012	±5%	17	100	2300	0.14	450	NLV32T-012J-PF
0.015	±5%	19	100	2100	0.16	450	NLV32T-015J-PF
0.018	±5%	21	100	1900	0.18	450	NLV32T-018J-PF
0.022	±5%	23	100	1700	0.20	450	NLV32T-022J-PF
0.027	±5%	23	100	1500	0.22	450	NLV32T-027J-PF
0.033	±5%	25	100	1400	0.24	450	NLV32T-033J-PF
0.039	±5%	25	100	1300	0.27	450	NLV32T-039J-PF
0.047	±5%	26	100	1200	0.3	450	NLV32T-047J-PF
0.056	±5%	26	100	1100	0.33	450	NLV32T-056J-PF
0.068	±5%	27	100	1000	0.36	450	NLV32T-068J-PF
0.082	±5%	27	100	900	0.4	450	NLV32T-082J-PF
0.1	±5%	28	100	700	0.44	450	NLV32T-R10J-PF
0.12	±5%	30	25.2	500	0.22	450	NLV32T-R12J-PF
0.15	±5%	30	25.2	450	0.25	450	NLV32T-R15J-PF
0.18	±5%	30	25.2	400	0.28	450	NLV32T-R18J-PF
0.22	±5%	30	25.2	350	0.32	450	NLV32T-R22J-PF
0.27	±5%	30	25.2	320	0.36	450	NLV32T-R27J-PF
0.33	±5%	30	25.2	300	0.4	450	NLV32T-R33J-PF
0.39	±5%	30	25.2	250	0.45	450	NLV32T-R39J-PF
0.47	±5%	30	25.2	220	0.5	450	NLV32T-R47J-PF
0.56	±5%	30	25.2	180	0.55	450	NLV32T-R56J-PF
0.68	±5%	30	25.2	160	0.6	450	NLV32T-R68J-PF
0.82	±5%	30	25.2	140	0.65	450	NLV32T-R82J-PF
1	±5%	30	7.96	120	0.7	400	NLV32T-1R0J-PF
1.2	±5%	30	7.96	100	0.75	390	NLV32T-1R2J-PF
1.5	±5%	30	7.96	85	0.85	370	NLV32T-1R5J-PF
1.8	±5%	30	7.96	80	0.9	350	NLV32T-1R8J-PF
2.2	±5%	30	7.96	75	1	320	NLV32T-2R2J-PF
2.7	±5%	30	7.96	70	1.1	290	NLV32T-2R7J-PF
3.3	±5%	30	7.96	60	1.2	260	NLV32T-3R3J-PF
3.9	±5%	30	7.96	55	1.3	250	NLV32T-3R9J-PF
4.7	±5%	30	7.96	50	1.5	220	NLV32T-4R7J-PF
5.6	±5%	30	7.96	45	1.6	200	NLV32T-5R6J-PF
6.8	±5%	30	7.96	40	1.8	180	NLV32T-6R8J-PF
8.2	±5%	30	7.96	35	2	170	NLV32T-8R2J-PF
10	±5%	30	2.52	30	2.1	150	NLV32T-100J-PF
12	±5%	30	2.52	20	2.5	140	NLV32T-120J-PF
15	±5%	30	2.52	20	2.8	130	NLV32T-150J-PF

Inductance uH	Inductance tolerance	Q typ.	Test frequency L,Q (MHz)	self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current* (mA)max.	Part No.
18	±5%	30	2.52	20	3.3	120	NLV32T-180J-PF
22	±5%	30	2.52	20	3.7	110	NLV32T-220J-PF
27	±5%	30	2.52	20	5	80	NLV32T-270J-PF
33	±5%	30	2.52	17	5.6	70	NLV32T-330J-PF
39	±5%	30	2.52	16	6.4	65	NLV32T-390J-PF
47	±5%	30	2.52	15	7	60	NLV32T-470J-PF
56	±5%	30	2.52	13	8	55	NLV32T-560J-PF
68	±5%	30	2.52	12	9	50	NLV32T-680J-PF
82	±5%	30	2.52	11	10	45	NLV32T-820J-PF
100	±5%	20	0.796	10	10	40	NLV32T-101J-PF
120	±5%	20	0.796	10	11	70	NLV32T-121J-PF
200	±5%	20	0.796	8	15	65	NLV32T-151J-PF
180	±5%	20	0.796	7	17	60	NLV32T-181J-PF
220	±5%	20	0.796	7	21	50	NLV32T-221J-PF
270	±5%	20	0.796	6	28	45	NLV32T-271J-PF
330	±5%	20	0.796	5	34	40	NLV32T-331J-PF
390	±5%	20	0.796	5	36	35	NLV32T-391J-PF
470	±5%	20	0.796	4	40	25	NLV32T-471J-PF