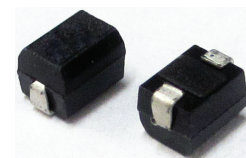


# SMD MOLDED WOUND CHIP INDUCTOR

AIMS-1812



**RoHS**  
Compliant



4.8 x 3.5 x 3.5mm

## FEATURES:

- Low DCR
- Best suited for power supply lines

## APPLICATIONS:

- VCRs & Video Cameras
- Automobile Audio Systems
- Computer products & Peripherals

## STANDARD SPECIFICATIONS:

### PARAMETERS

ABRACON P/N:	AIMS-1812-xxx Series
Operating temperature:	- 40°C to + 85°C
Storage temperature:	+22°C to +28°C, Humidity < 80%RH

Part No. ASPI-1812-Inductance Code	L(μH)	Tolerance	Q	Test Freq.	SRF(MHz)	DCR(Ω)	Idc(mA)
		(%)	(min)	(MHz)	(min)	(max)	(max)
AIMS-1812-R10	0.10	M	35	25.2	300	0.20	800
AIMS-1812-R12	0.12	M	35	25.2	280	0.20	770
AIMS-1812-R15	0.15	M	35	25.2	250	0.20	730
AIMS-1812-R18	0.18	M	35	25.2	220	0.24	700
AIMS-1812-R22	0.22	M	40	25.2	200	0.30	665
AIMS-1812-R27	0.27	M	40	25.2	180	0.30	635
AIMS-1812-R33	0.33	M	40	25.2	165	0.30	605
AIMS-1812-R39	0.39	M	40	25.2	150	0.30	575
AIMS-1812-R47	0.47	M	40	25.2	145	0.32	545
AIMS-1812-R56	0.56	M	40	25.2	140	0.40	520
AIMS-1812-R68	0.68	M	40	25.2	135	0.40	500
AIMS-1812-R82	0.82	M	40	25.2	130	0.50	475
AIMS-1812-1R0	1.0	K	50	7.96	100	0.50	450
AIMS-1812-1R2	1.2	K	50	7.96	80	0.60	430
AIMS-1812-1R5	1.5	K	50	7.96	70	0.60	410
AIMS-1812-1R8	1.8	K	50	7.96	60	0.70	390
AIMS-1812-2R2	2.2	K	50	7.96	55	0.70	380
AIMS-1812-2R7	2.7	K	50	7.96	50	0.80	370
AIMS-1812-3R3	3.3	K	50	7.96	45	0.80	355
AIMS-1812-3R9	3.9	K	50	7.96	40	0.90	330
AIMS-1812-4R7	4.7	K	50	7.96	35	1.0	315
AIMS-1812-5R6	5.6	K	50	7.96	33	1.1	300
AIMS-1812-6R8	6.8	K	50	7.96	27	1.2	285
AIMS-1812-8R2	8.2	K	50	7.96	25	1.4	270
AIMS-1812-100	10	K	50	2.52	20	1.6	250
AIMS-1812-120	12	K	50	2.52	18	2.0	225
AIMS-1812-150	15	K	50	2.52	17	2.5	200
AIMS-1812-180	18	K	50	2.52	15	2.8	190
AIMS-1812-220	22	K	50	2.52	13	3.2	180
AIMS-1812-270	27	K	50	2.52	12	3.6	170
AIMS-1812-330	33	K	50	2.52	11	4.0	160
AIMS-1812-390	39	K	50	2.52	10	4.5	150
AIMS-1812-470	47	K	50	2.52	10	5.0	140
AIMS-1812-560	56	K	50	2.52	9.0	5.5	135
AIMS-1812-680	68	K	50	2.52	9.0	6.0	130
AIMS-1812-820	82	K	50	2.52	8.0	7.0	120
AIMS-1812-101	100	K	40	0.796	8.0	8.0	110
AIMS-1812-121	120	K	40	0.796	6.0	8.0	110
AIMS-1812-151	150	K	40	0.796	5.0	9.0	105

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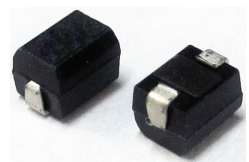
**ABRACON**  
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Revised: 04.17.12

# SMD MOLDED WOUND CHIP INDUCTOR

AIMS-1812



4.8 x 3.5 x 3.5mm

## Key Electrical Specifications (Con'd)

Part No. AIMS-1812-Inductance Code	L(μH)	Tolerance (%)	Q (min)	Test Freq. (MHz)	SRF(MHz) (min)	DCR(Ω) (max)	Idc(mA) (max)
AIMS-1812-181	180	K	40	0.796	5.0	9.5	102
AIMS-1812-221	220	K	40	0.796	4.0	10.0	100
AIMS-1812-271	270	K	40	0.796	4.0	15.0	92
AIMS-1812-331	330	K	40	0.796	3.5	15.0	85
AIMS-1812-391	390	K	40	0.796	3.0	18.0	80
AIMS-1812-471	470	K	40	0.796	3.0	26.0	62
AIMS-1812-561	560	K	30	0.796	3.0	30.0	50
AIMS-1812-681	680	K	30	0.796	3.0	30.0	50
AIMS-1812-821	820	K	30	0.796	2.5	43.0	30

## Test Conditions

Isat: ΔL/L (initial) ≥ -10%

## OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

AIMS-1812-  -

**Inductance Code**  
Please refer to the table above

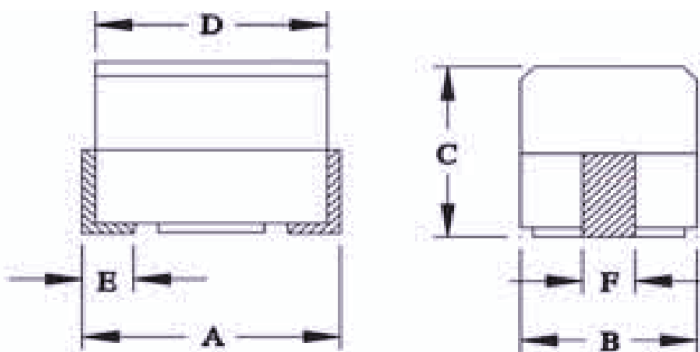
**Tolerance %**  
M: ± 20%\*  
K: ± 10%\*

**Packaging**  
T: Tape and Reel (500pcs / reel)

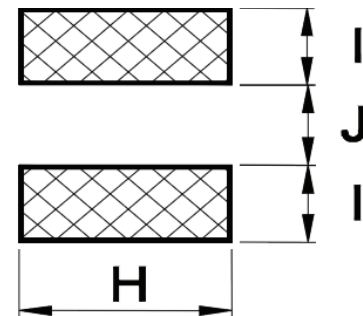
\*M for L = 0.1 ~ 0.82μH

\*K for L = 1.0 ~ 820μH

## OUTLINE DIMENSIONS:



## Recommended Land Pattern



A max.	B max.	C max.	D ref.	E ref.	F ref.	I	J	H
4.8	3.5	3.5	4.2±0.2	1.1	1.2 or 1.8	1.50	3.00	2.80

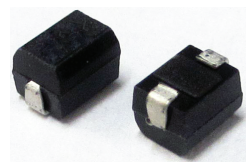
Dimension: mm

# SMD MOLDED WOUND CHIP INDUCTOR

AIMS-1812

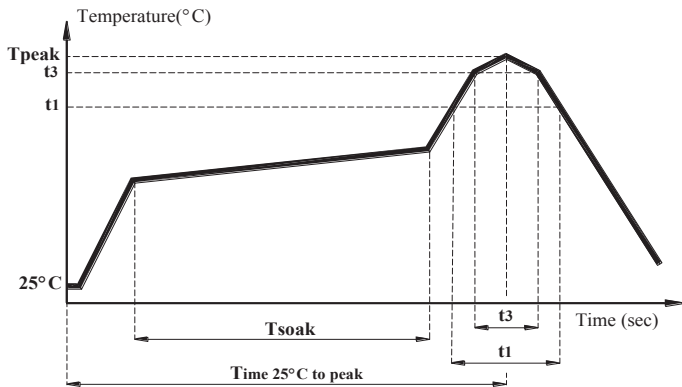


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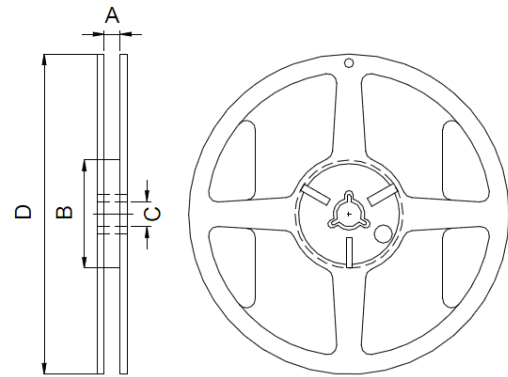
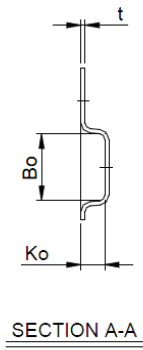
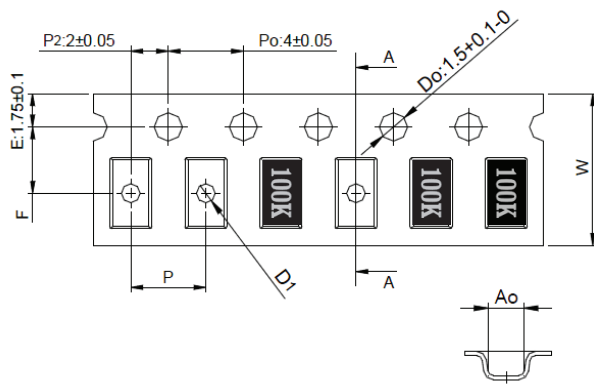
## REFLOW PROFILE:



Item	mark	
Temperature rise gradient		3%/sec (max)
Heating time	Tsoak	50s ~ 150s
Heating temperature		120% ~ 180%
Time over 217%	t1	70 sec
Time within 5% of actual peak temperature	t3	10~30 sec
Peak temperature	Tpeak	250 ( +0 / -5 % )
Time 25% to peak Temperature		6 minutes max.

## TAPE & REEL:

T: 500pcs / reel



A0	B0	K0	P	F	W	t	A	B	C	D
3.5 ± 0.1	4.9 ± 0.1	3.4 ± 0.1	8 ± 0.1	5.5 ± 0.1	12 ± 0.2	0.3 ± 0.05	13.5 ± 0.5	60 ± 2.0	13.5 ± 0.5	178 ± 2.0

Dimension: mm

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