



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# SMD MOLDED WOUND CHIP INDUCTOR

AIMS-1812



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



# 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

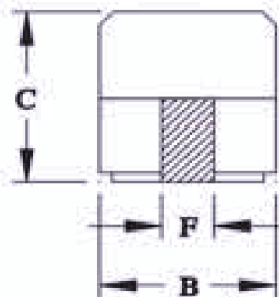
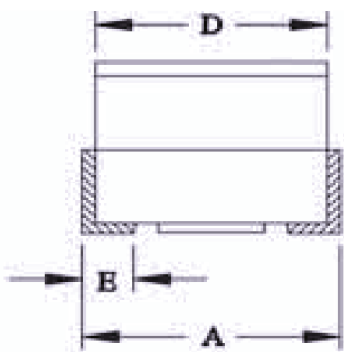
**Tolerance %**  
M: ± 20%\*  
K: ± 10%\*

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

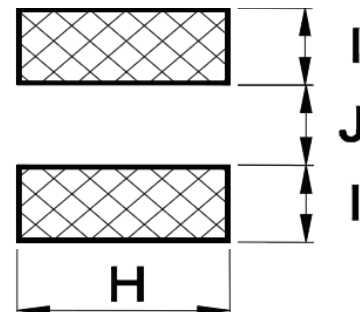
\*M for L = 0.1 ~ 0.82μH

\*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

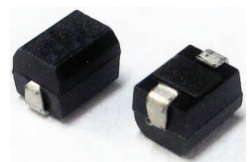
Dimension: mm

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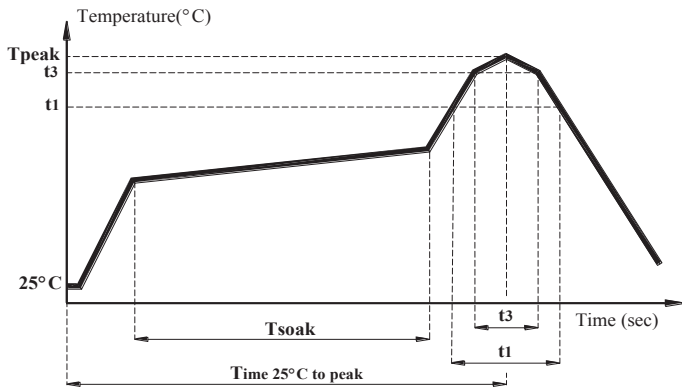


RoHS  
Compliant



4.8 x 3.5 x 3.5mm

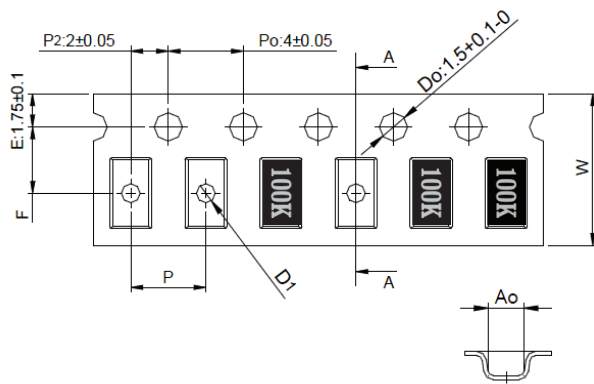
## REFLOW PROFILE:



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