

SMD Molded Wound Chip Inductor



AISM-1812 Series

Request Samples



Check Inventory



4.8 x 3.5 x 3.5mm
RoHS/RoHS II Compliant
MSL Level = 2

Features

- Low DCR
- Best suited for power supply lines

Applications

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

Electrical Specifications

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



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Electrical Specifications (Cont'd)

Part No. ASPI-1812-Inductance Code	L(μ H)	Tolerance	Q	Test Freq.	SRF(MHz)	DCR(Ω)	Idc(mA)
		(%)	(min)	(MHz)	(min)	(max)	(max)
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
AIMS-1812-181	180	K	40	0.796	5.5	9.5	102
AIMS-1812-221	220	K	40	0.796	5.0	10	100
AIMS-1812-271	270	K	40	0.796	4.5	12	92
AIMS-1812-331	330	K	40	0.796	4.0	14	85
AIMS-1812-391	390	K	40	0.796	3.5	18	80
AIMS-1812-471	470	K	40	0.796	3.5	26	62
AIMS-1812-561	560	K	30	0.796	3.0	30	50
AIMS-1812-681	680	K	30	0.796	3.0	30	50
AIMS-1812-821	820	K	30	0.796	2.5	35	30
AIMS-1812-102	1000	K	20	0.252	2.5	40	30

Test Conditions: Isat: $\Delta L/L$ (initial) $\geq -10\%$

Operating Temperature: -40°C to $+85^{\circ}\text{C}$

Storage Temperature (in packaging): $+22^{\circ}\text{C}$ to $+28^{\circ}\text{C}$, Humidity $< 80\%RH$

AIMS-1812 is RoHS Compliant and Pb Free.

MSL level: 2 (This product is packed with dry packaging)



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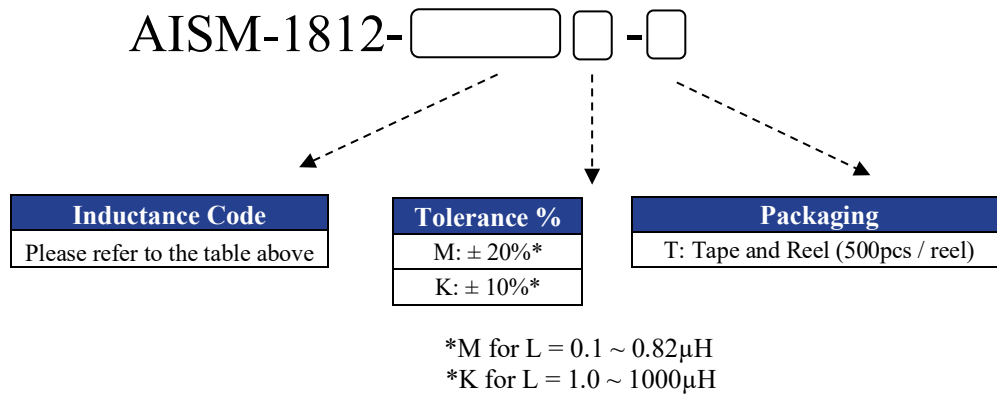
Check Inventory



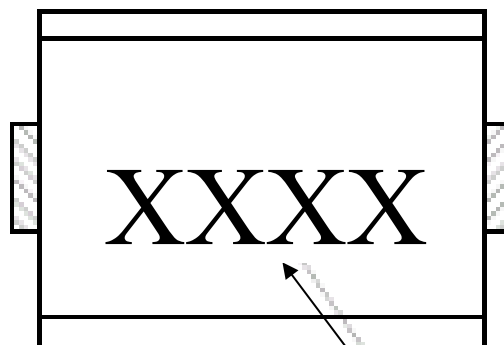
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Part Identification

2.0 Part Number Identification



Marking



Inductance Code and Tolerance
e.g. 8R2K

Marking Method = Ink Marking

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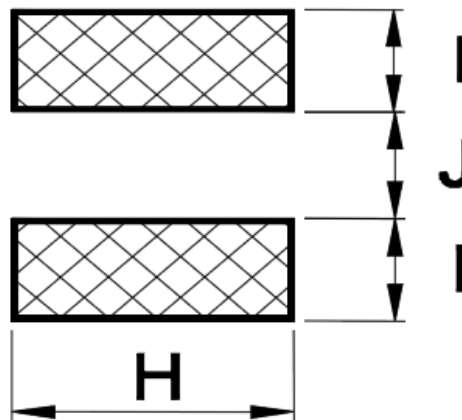
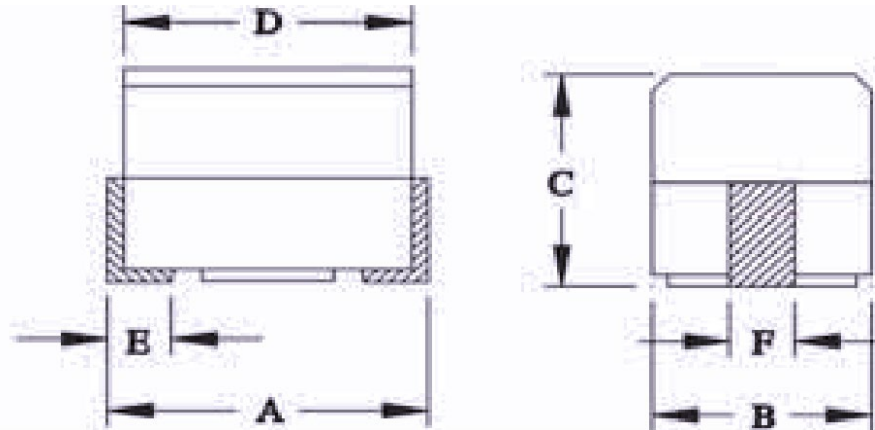


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Mechanical Specifications



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

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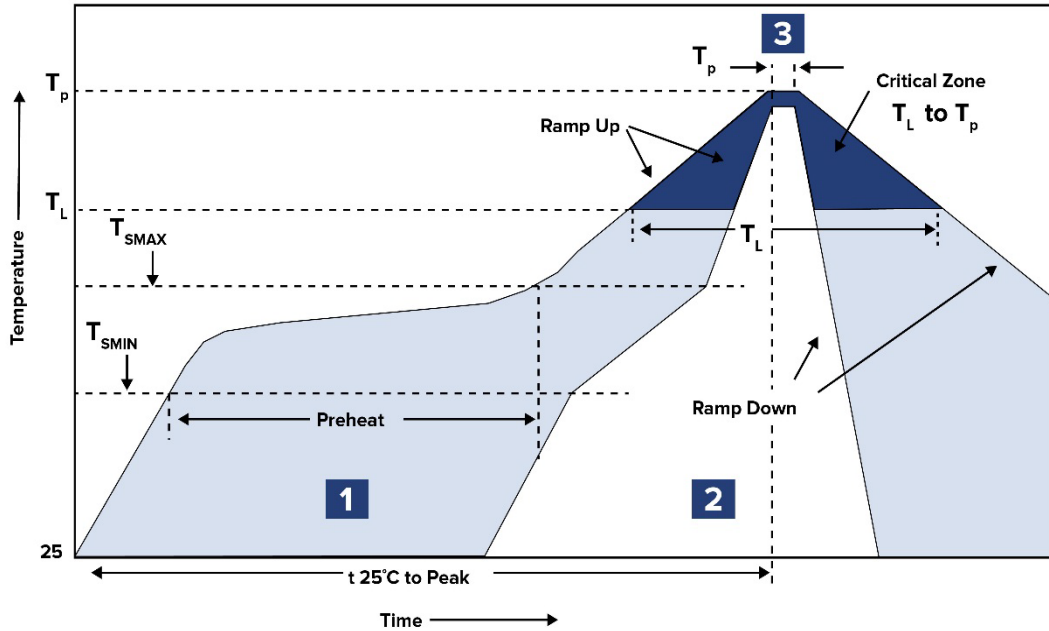


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Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 120°C ~ 180°C	50~ 150 sec.
2	Reflow	T_L 217°C	90 sec.
3	Peak heat	T_P 260°C (+0/-5°C)	10 ~30 sec. MAX

*Time from 25°C to peak should not exceed 6 min

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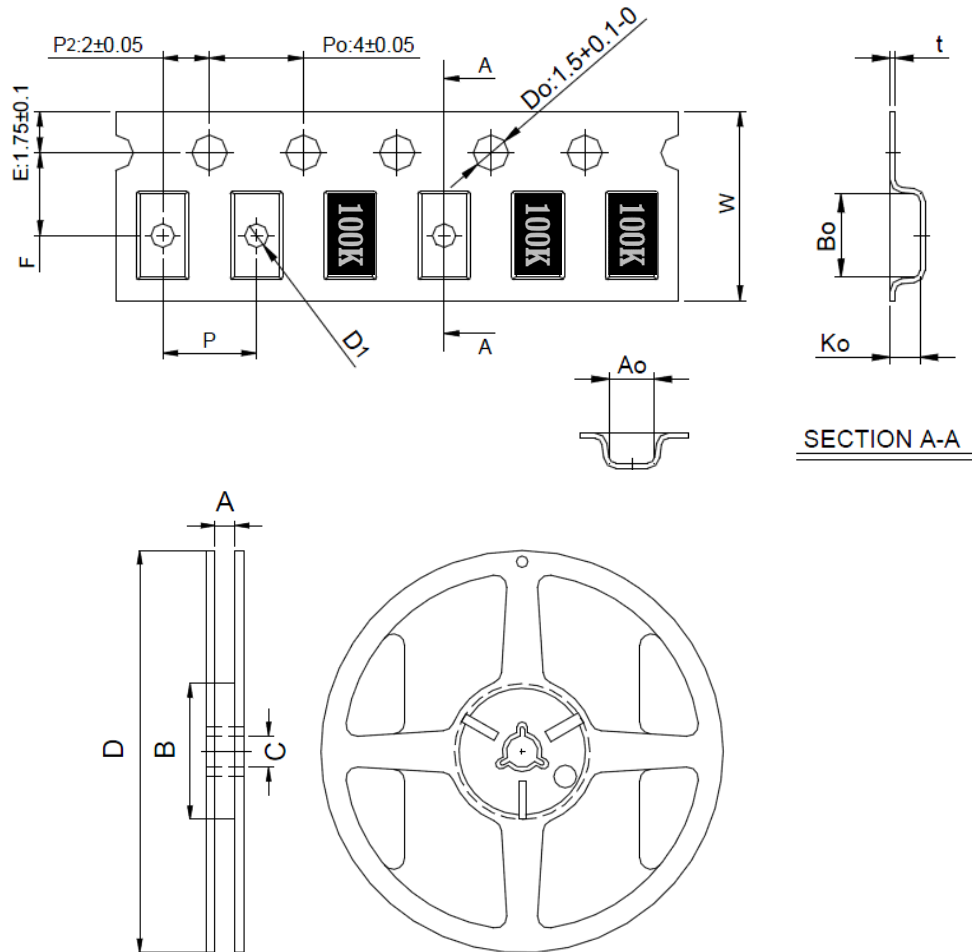
Check Inventory



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Packing

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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