Ceramic Wire Wound Inductors

AISC-1206

RoHS/RoHS II Compliant



3.56 x 2.16 x 1.52mm

FEATURES:

- Exceptionally high Q compared to non-wirewound inductor, especially at high frequencies
- Inductance values available from 3.3 nH to 1200nH

APPLICATIONS:

- Widely applied in the VCO, SAW circuit for GSM, CDMA Communications
- Bluetooth, W-LAN
- Used in hard disk, notebook computer and other electronic equipment

STANDARD SPECIFICATIONS:

Part Number AISC-1206- Inductance Code	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	-	MHz	Ω	mA	MHz
Symbol	L	-	Q	Freq.	DCR	Ir	S.R.F
AISC-1206-3N3	3.3	J, K	20	100/300	0.07	1000	6200
AISC-1206-6N8	6.8	J, K	30	100/300	0.07	1000	5500
AISC-1206-10N	10	G, J, K	40	100/300	0.09	1000	4000
AISC-1206-12N	12	G, J, K	40	100/300	0.09	1000	3200
AISC-1206-15N	15	G, J, K	40	100/300	0.12	1000	3200
AISC-1206-18N	18	G, J, K	45	100/300	0.12	1000	2800
AISC-1206-22N	22	G, J, K	50	100/300	0.12	1000	2200
AISC-1206-27N	27	G, J, K	50	100/300	0.12	1000	1800
AISC-1206-33N	33	G, J, K	50	100/300	0.12	1000	1800
AISC-1206-39N	39	G, J, K	50	100/300	0.12	1000	1800
AISC-1206-47N	47	G, J, K	50	100/300	0.13	1000	1500
AISC-1206-56N	56	G, J, K	55	100/300	0.14	1000	1450
AISC-1206-68N	68	G, J, K	55	100/300	0.26	900	1200
AISC-1206-82N	82	G, J, K	55	100/300	0.21	900	1200
AISC-1206-R10	100	G, J, K	55	100/300	0.30	850	1100
AISC-1206-R12	120	G, J, K	60	100/300	0.30	800	1100
AISC-1206-R15	150	G, J, K	55	100/300	0.31	750	950
AISC-1206-R18	180	G, J, K	60	50/300	0.43	700	900
AISC-1206-R22	220	G, J, K	60	50/300	0.56	670	760
AISC-1206-R27	270	G, J, K	50	50/300	0.56	630	730
AISC-1206-R33	330	G, J, K	45	50/150	0.70	590	650
AISC-1206-R39	390	G, J, K	45	50/150	0.80	530	600
AISC-1206-R47	470	G, J, K	45	50/150	1.30	490	550
AISC-1206-R56	560	G, J, K	45	35/150	1.34	460	470
AISC-1206-R68	680	G, J, K	45	35/150	1.58	430	450
AISC-1206-R82	820	G, J, K	45	35/150	1.82	400	420
AISC-1206-1R0	1000	G, J, K	45	35/150	2.80	320	400
AISC-1206-1R2	1200	G, J, K	45	35/150	3.20	300	380

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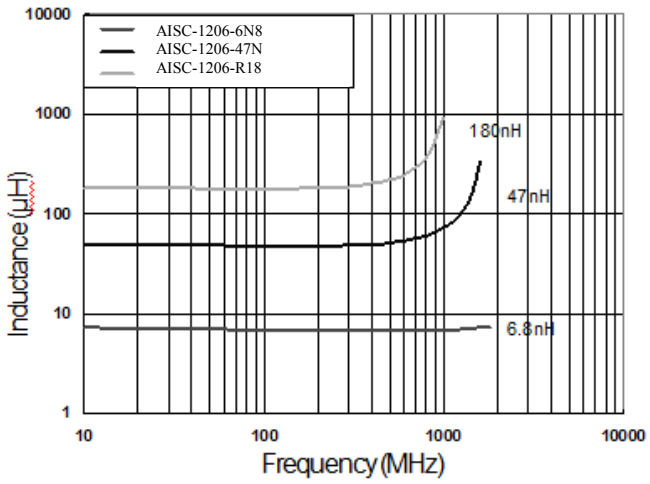


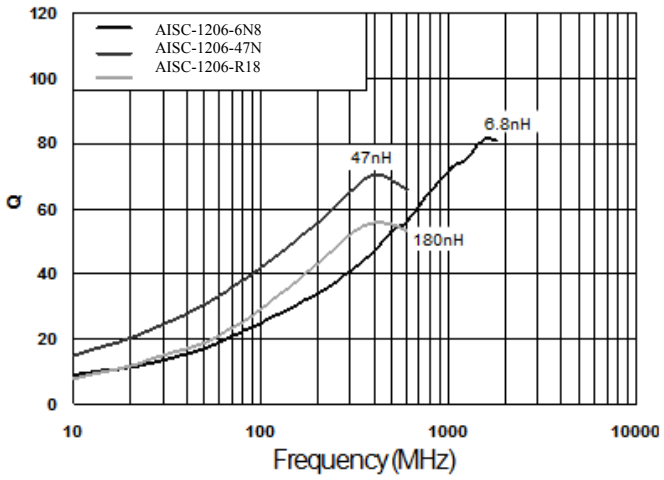
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Test Equipment
Inductance (L): Agilent4287A+Agilent16197A or equivalent, -13dBm or 10mA
Direct Current Resistance (DCR): HIOKI 3540 or equivalent
Q Factor (Q): Agilent4287A+Agilent16197A or equivalent, -13dBm or 10mA
Self-Resonant Frequency (SRF): Agilent4991B+Agilent16197A and HP 8753E or equivalent, -20dBm or 50mV
Rated Current (Ir): Ir is direct electric current as chip surface temperature rose just 20oC against chip initial surface temperature (Ta)

Operating Temperature: -40ºC to +125ºC
Storage Temperature: -10ºC to +40ºC, 70% RH max.

ELECTRICAL CHARACTERISTICS CURVES





PART NUMBER IDENTIFICATION

AISC-1206 - ☐☐ - ☐

Inductance Code	Tolerance Code	Packaging
Please refer to the table	G: ±2%	T: Tape & Reel (2k/reel)
	J: ±5%	
	K: ±10%	

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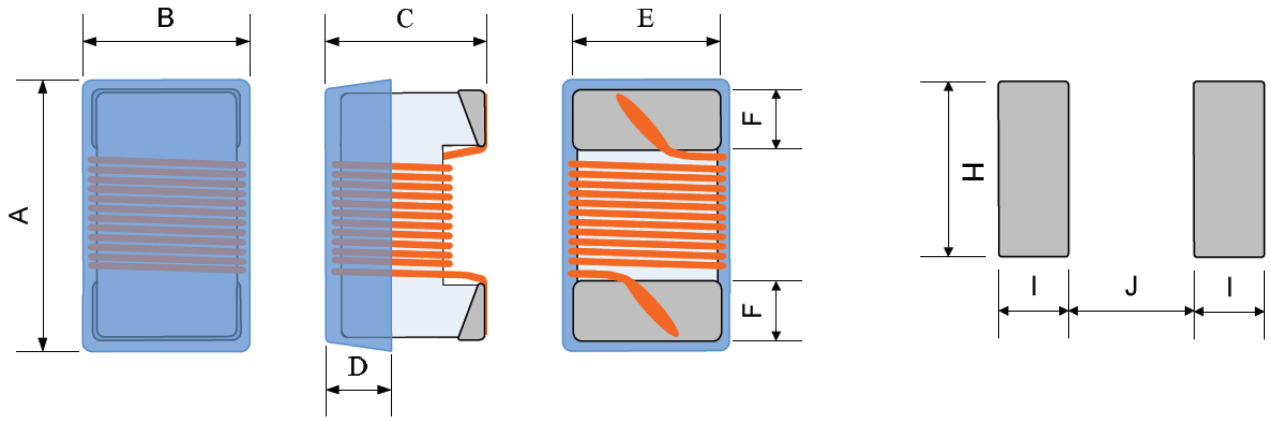
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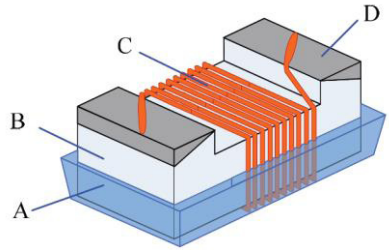
OUTLINE DIMENSIONS:



A MAX.	B MAX.	C MAX.	D REF.	E	F	H REF.	I REF.	J REF.
3.56	2.16	1.52	0.51	1.6±0.2	0.5±0.2	1.93	1.02	1.78

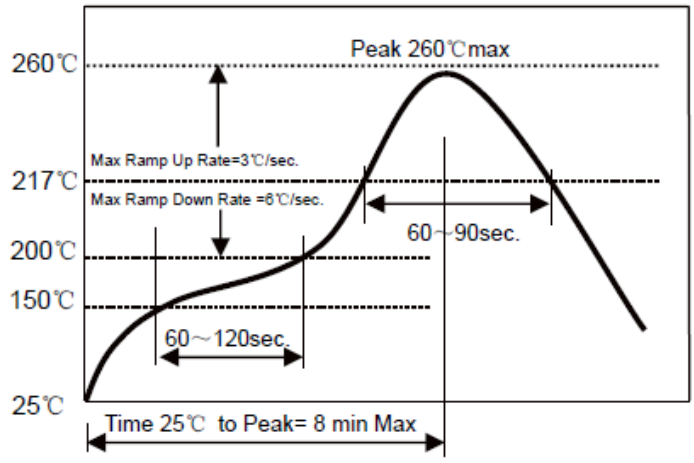
Dimension: mm

Materials



No.	Components	Material
A	Coating	Ultraviolet epoxy resin
B	Core	Ceramic
C	Wire	Polyurethane system enameled copper wire
D	Electrodes	Mo-Mn with Ni and Au plating

REFLOW PROFILE:



- Δ 1~2 °C/sec. Ramp
- Δ Pre-heating: 150~190°C /90±30 sec.
- Δ Time above 240 °C: 20~40sec
- Δ Peak temperature: 260 °C Max./10sec;
- Δ Solder paste: Sn/3.0Ag/0.5Cu
- Δ Max.2 times for Re-flowing

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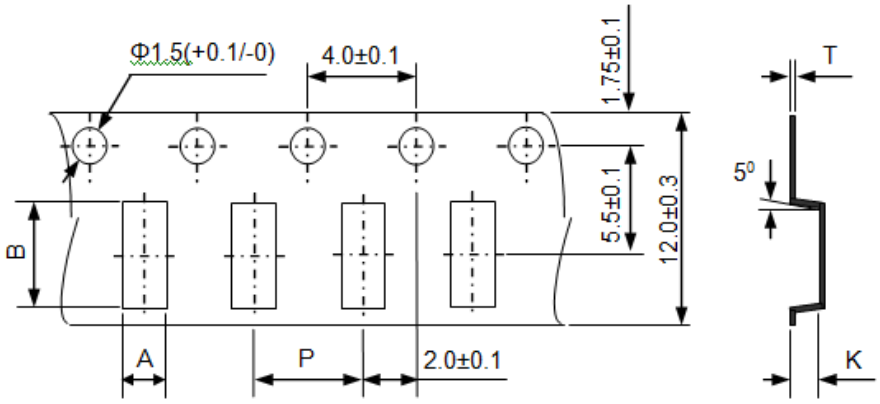
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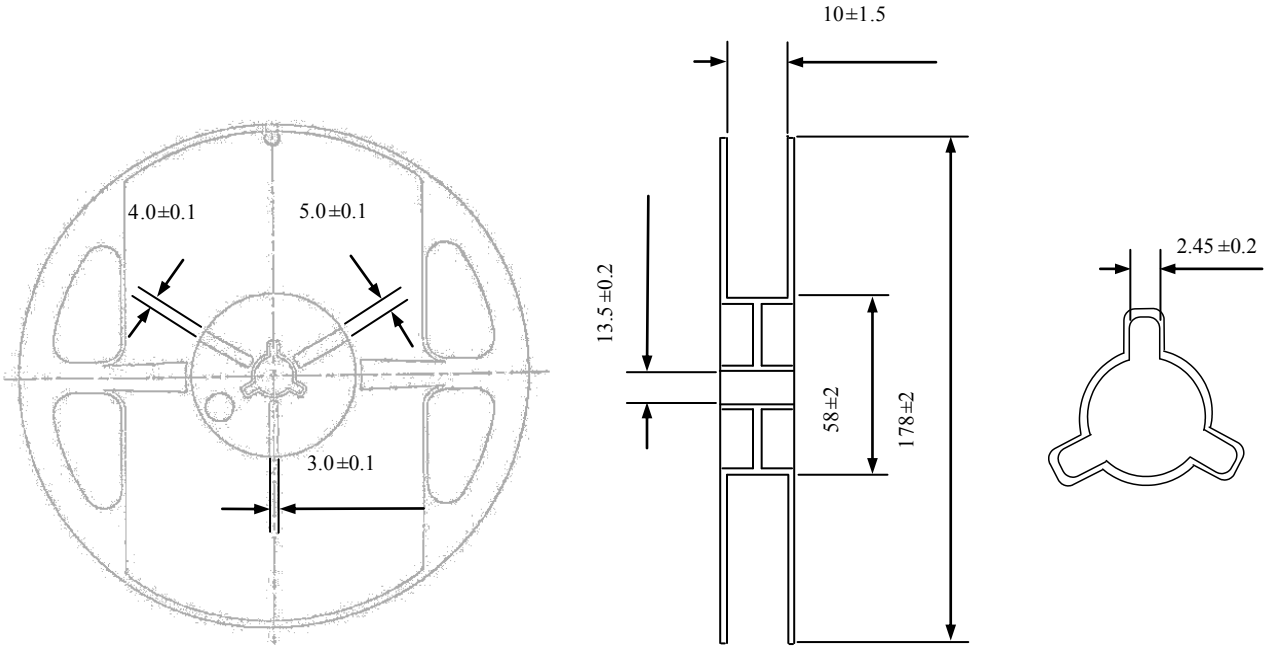
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TAPE & REEL:

T= tape and reel (2,000pcs/reel)



A	B	P	K	T
2.40±0.2	3.80±0.2	4.0±0.1	1.60±0.3	0.3±0.1



Dimension: mm

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