Multilayer Ferrite Chip Inductor



AIML-1206 Series

Request Samples Check Inventory

3.2 x 1.6 x 0.85 mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- Monolithic structure for higher reliability, compact size, & lightweight
- Magnetically shielded design to eliminate cross coupling
- Excellent solderability and heat resistance for reflow soldering
- Perfect shape for PCB mounting with no polarity

Applications

- Resonance circuit, traps and filter circuits
- RF choke for cordless phones and radio equipment
- Communications, video and audio equipment, computers and remote Control.

Electrical Specifications

Part Number	L	Tolerance	Q	Test Frequency	SRF	DCR	Ir
	0.1MHz/1.0V		Min.		Min.	Max	Max
Units	µH	%		MHz	MHz	Ω	mA
AIML-1206-R047	0.047	K, M	20	50	320	0.15	300
AIML-1206-R068	0.068	K, M	20	50	280	0.25	300
AIML-1206-R10	0.100	K	20	25	235	0.25	250
AIML-1206-R12	0.120	K	20	25	220	0.3	250
AIML-1206-R15	0.150	K	20	25	200	0.3	250
AIML-1206-R18	0.180	K	20	25	185	0.4	250
AIML-1206-R22	0.220	K	20	25	170	0.4	250
AIML-1206-R27	0.270	K	20	25	150	0.5	250
AIML-1206-R33	0.330	K	20	25	145	0.6	250
AIML-1206-R39	0.390	K	25	25	135	0.5	200
AIML-1206-R47	0.470	K	25	25	125	0.6	200
AIML-1206-R56	0.560	K	25	25	115	0.7	150
AIML-1206-R68	0.680	K	25	25	105	0.8	150
AIML-1206-R82	0.820	K	25	25	100	0.9	150
AIML-1206-1R0	1.0	K	45	10	75	0.40	100
AIML-1206-1R2	1.2	K	45	10	65	0.5	100
AIML-1206-1R5	1.5	K	45	10	60	0.5	50
AIML-1206-1R8	1.8	K	45	10	55	0.50	50
AIML-1206-2R2	2.2	K	45	10	50	0.6	50
AIML-1206-2R7	2.7	K	45	10	45	0.6	50
AIML-1206-3R3	3.3	K	45	10	41	0.7	50
AIML-1206-3R9	3.9	K	45	10	38	0.8	50
AIML-1206-4R7	4.7	K	45	10	35	0.9	50
AIML-1206-5R6	5.6	K	50	4	32	0.7	25

ABRACON

5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION E : 8/5/2024

ABRACON IS ISO9001-2015 CERTIFIED

Multilayer Ferrite Chip Inductor



AIML-1206 Series

Request Samples | Check Inventory

3.2 x 1.6 x 0.85 mm
RoHS/RoHS II Compliant
MSL Level = 1

Part Number	L	Tolerance	Q	Test Frequency	SRF	DCR	Ir
	0.1MHz/1.0V		Min.		Min.	Max	Max
Units	µH	%		MHz	MHz	Ω	mA
AIML-1206-6R8	6.8	K	50	4	29	0.8	25
AIML-1206-8R2	8.2	K	50	4	26	0.9	25
AIML-1206-100	10.0	K	50	2	24	1	25
AIML-1206-120	12.0	K	50	2	22	1.05	15
AIML-1206-150	15.0	K	35	1	19	0.7	5
AIML-1206-180	18.0	K	35	1	18	0.7	5
AIML-1206-220	22.0	K	35	1	16	0.90	5
AIML-1206-270	27.0	K	35	1	14	0.90	5
AIML-1206-330[§]	33.0	K	35	1	13	1.05	5
AIML-1206-390[§]	39.0	K	40	1	11	3	5
AIML-1206-470[§]	47.0	K	40	1	10	3.4	5

§ Height of this component is 1.10 ±0.2mm [0.043 ±0.008 inches]

Test Conditions and equipment

Q: HP4291 Impedance Analyzer, 50mV
DCR: HP4263A LCR meter
SRF: HP4291 Impedance analyzer
Ir: HP4291 Impedance Analyzer, DC power HP6632 and Adapter HP16200. ΔL/L (initial) ≥ -5%

Unless otherwise specified

Temperature: Ordinary Temperature (5 to 35ºC)
Humidity: Ordinary Humidity (25 to 85% RH)

AIML-1206 Series is RoHS Compliant and Pb free

Part Identification

AIML - 1206 - ☐☐ - ☐

Inductance Code	Tolerance	Packaging
See Electrical Specification table	K = ± 10% M = ± 20%	T: Tape and Reel (See Packaging)

Marking

ABRACON
5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION E : 8/5/2024

ABRACON IS ISO9001-2015 CERTIFIED

Multilayer Ferrite Chip Inductor



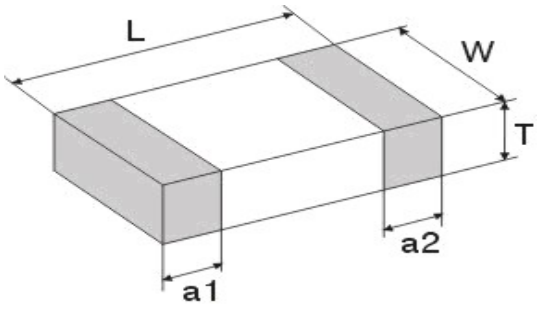
AIML-1206 Series

Request Samples Check Inventory

3.2 x 1.6 x 0.85 mm
RoHS/RoHS II Compliant
MSL Level = 1

No Marking

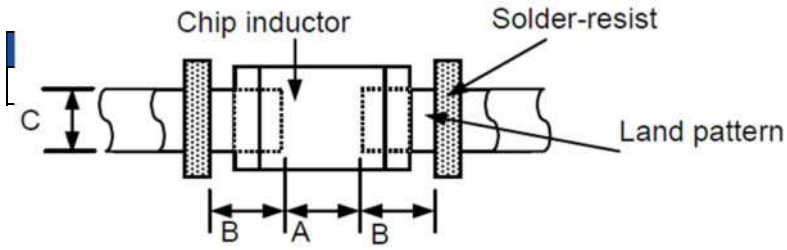
Mechanical Specifications



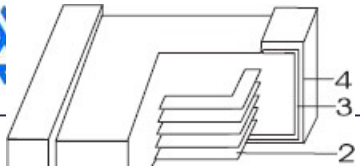
Series	L	W	T	a1, a2
AIML-1206	3.20±0.20	1.60±0.20	0.85±0.2	0.50±0.30
	[0.126±0.008]	[0.063±0.008]	[0.033±0.008]	[0.02±0.012]

Note: Height of AIML-1206-330, AIML-1206-390, and AIML-1206-470 is 1.10 ±0.2mm [0.043 ±0.008 inches]

Dimensions: mm[inch]



Materials



5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

Multilayer Ferrite Chip Inductor



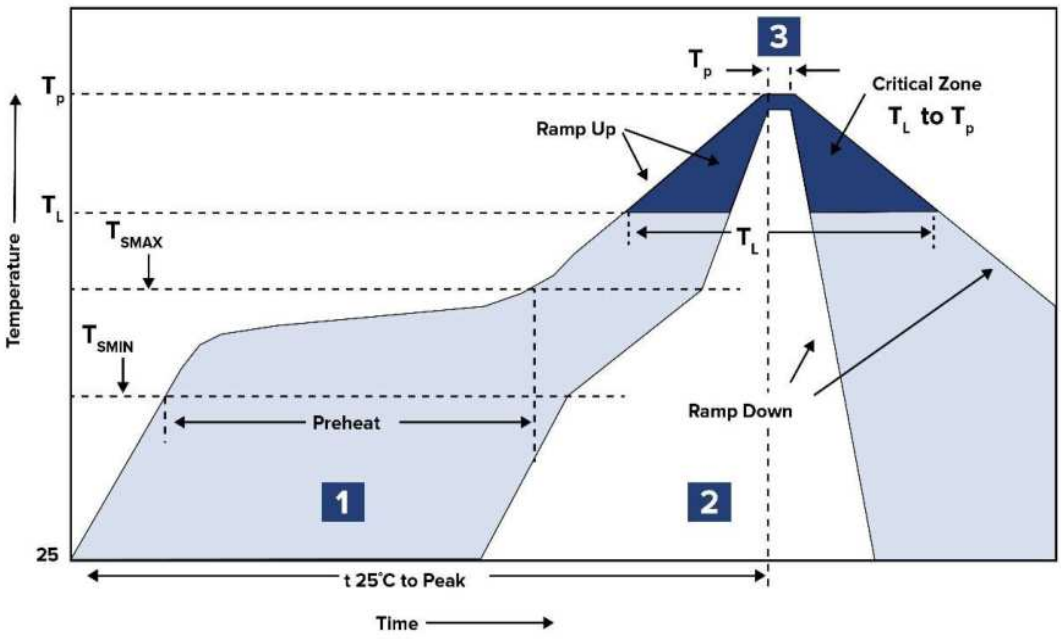
AIML-1206 Series

Request Samples Check Inventory

3.2 x 1.6 x 0.85 mm
RoHS/RoHS II Compliant
MSL Level = 1

	Components	Material
1	Base Material	Ferrite (Ni-Cu-Zn series)
2	Internal Conductor	Ag
3	Terminal Electrode	Ag
4	Terminal Electrode	Ni-Sn

Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} ~ T_{SMAX} 150°C ~ 200°C	60 ~ 180 sec.
2	Reflow	T_L 217°C	60 ~ 150 sec.
3	Peak heat	T_P 260°C	3 ~ 4 sec. MAX

Packaging

ABRACON

5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION E : 8/5/2024

ABRACON IS ISO9001-2015 CERTIFIED

Multilayer Ferrite Chip Inductor

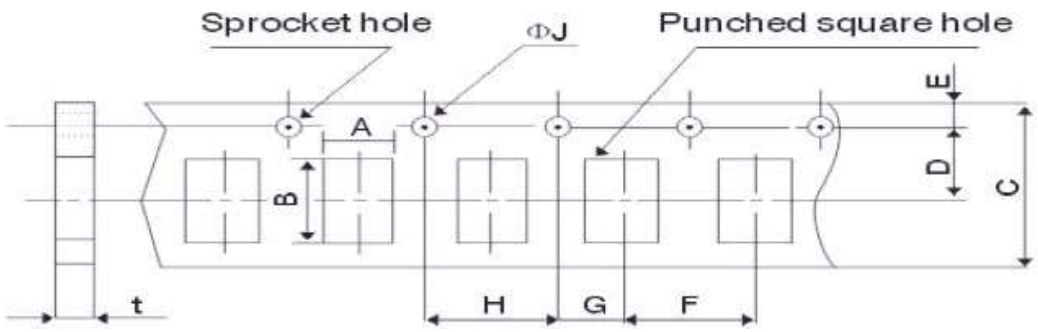


AIML-1206 Series

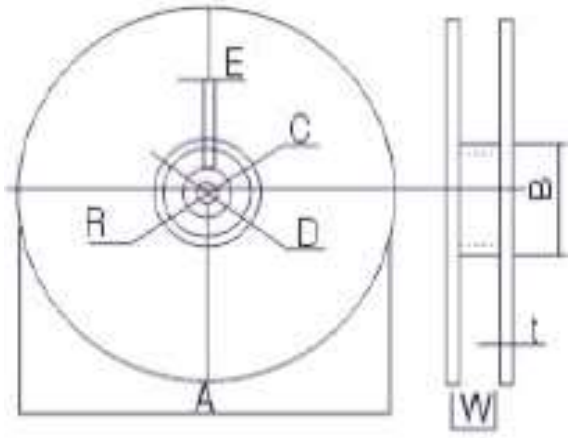
Request Samples | Check Inventory

3.2 x 1.6 x 0.85 mm
RoHS/RoHS II Compliant
MSL Level = 1

Tape & Reel: 3,000 pcs/reel



Codes	A	B	C	D	E	F	G	H	ΦJ	t(max)
AIML-1206	2.0±0.2	3.6±0.2	8.0±0.3	3.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.1	1.5+0.1/-0	2.0±0.05



A	B	C	D	E	W	t	R
178±2	60±2	13.0±0.5	21.0±0.8	2.0±0.5	10.0±1.15	1.2±0.2	1.0±0.25

Dimensions: mm

ATTENTION: Abracon LLC's products are Commercial-Off-The-Shelf (COTS, which are designed, intended and validated for use in commercial, industrial and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.

ABRACON

5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION E : 8/5/2024

ABRACON IS ISO9001-2015 CERTIFIED