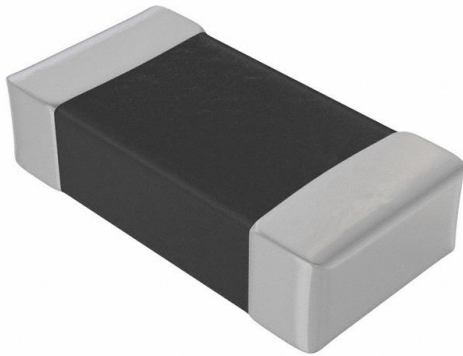


AIML-1206-R27K-T Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	AIML-1206-R27K-T-DG
Manufacturer	Abracon LLC
Manufacturer Product Number	AIML-1206-R27K-T
Description	FIXED IND 270NH 250MA 400MOHM SM
Detailed Description	270 nH Shielded Multilayer Inductor 250 mA 400mOhm Max 1206 (3216 Metric)



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

AIML-1206-R27K-T

Series:

AIML-1206

Type:

Multilayer

Inductance:

270 nH

Current Rating (Amps):

250 mA

Shielding:

Shielded

Q @ Freq:

30 @ 25MHz

Ratings:

-

Inductance Frequency - Test:

25 MHz

Package / Case:

1206 (3216 Metric)

Size / Dimension:

0.126" L x 0.063" W (3.20mm x 1.60mm)

Manufacturer:

Abracon LLC

Product Status:

Active

Material - Core:

Ferrite

Tolerance:

±10%

Current - Saturation (Isat):

-

DC Resistance (DCR):

400mOhm Max

Frequency - Self Resonant:

180MHz

Operating Temperature:

-55°C ~ 125°C

Mounting Type:

Surface Mount

Supplier Device Package:

1206

Height - Seated (Max):

0.055" (1.40mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.8000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

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.				
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



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Multilayer Ferrite Chip Inductor



AIML-1206 Series

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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.				
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 ^s	33.0	K	35	1	13	1.05	5
AIML-1206-390 ^s	39.0	K	40	1	11	3	5
AIML-1206-470 ^s	47.0	K	40	1	10	3.4	5

^s 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 35°C)

Humidity: Ordinary Humidity (25 to 85% RH)

AIML-1206 Series is RoHS Compliant and Pb free

Part Identification

AIML-1206-1500-851K-T 4P19CON LLC FIXED IND 520MH 400MOHMH 2M

AIML - 1206 - [] [] - []

Inductance Code

See Electrical Specification table

Tolerance

K = ± 10%
 M = ± 20%

Packaging

T: Tape and Reel (See Packaging)



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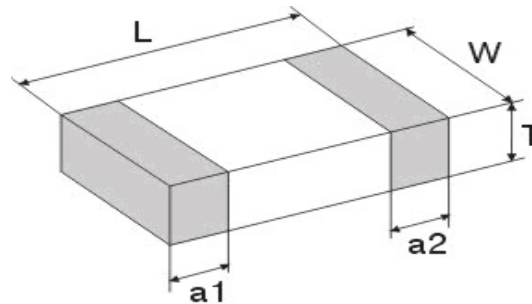
Check Inventory



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

No Marking

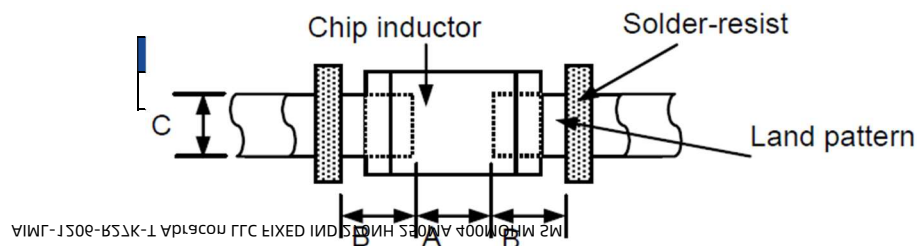
Mechanical Specifications



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



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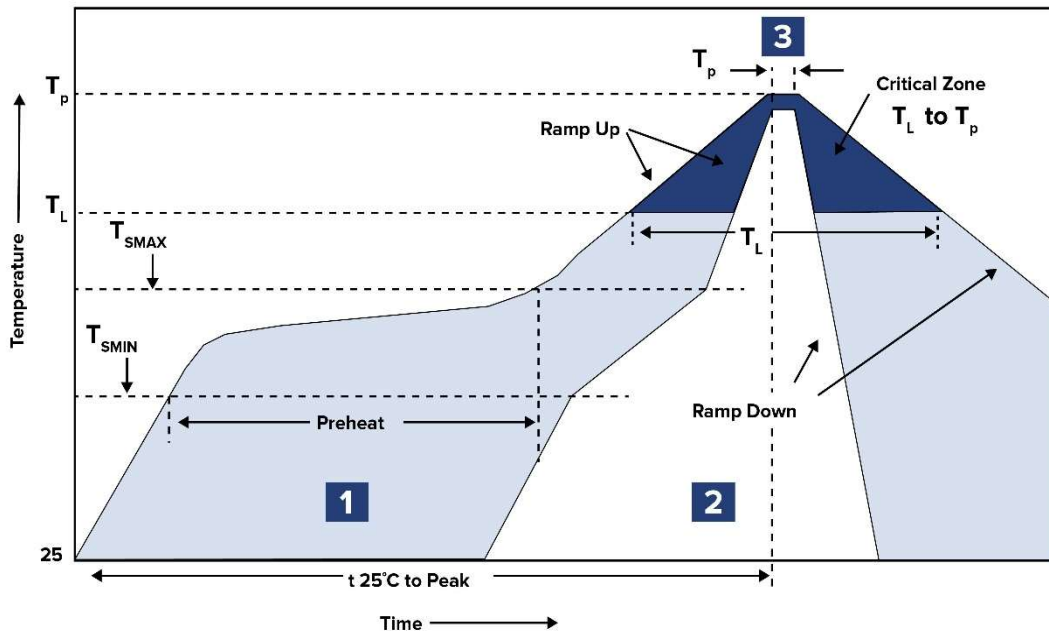
Check Inventory



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	$T_{SMIN} \sim T_{SMAX}$ 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



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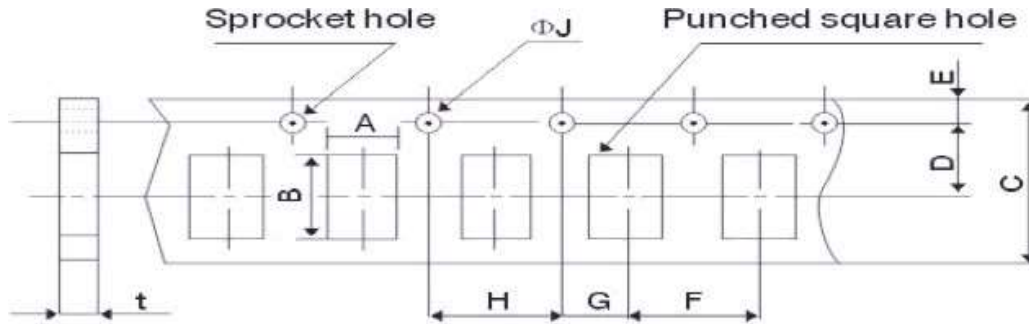


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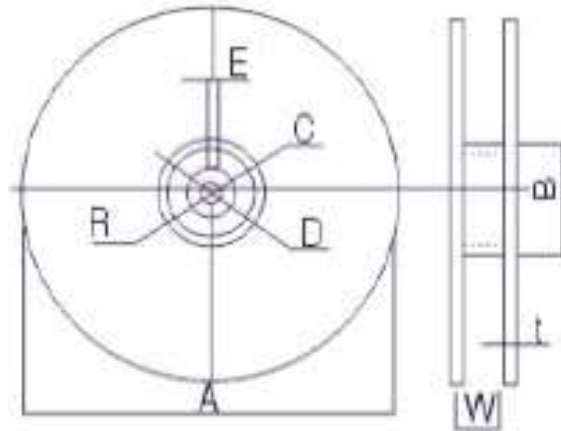


3.2 x 1.6 x 0.85 mm
RoHS/RoHS II Compliant
MSL Level = 1

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

AIML-1206-85JK-1 VPL9CON FCC FIXED IND 520MHZ 400MOHM 2M

Dimensions: mm

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