

# AISM-1008-R012J-T Datasheet



DiGi Electronics Part Number	AISM-1008-R012J-T-DG
Manufacturer	<a href="#">Abracon LLC</a>
Manufacturer Product Number	AISM-1008-R012J-T
Description	IND 0.012UH 0.1A 270M
Detailed Description	12 nH Shielded Molded Inductor 500 mA 270mOhm Max 1008 (2520 Metric)

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## Purchase and inquiry

Manufacturer Product Number:

AISM-1008-R012J-T

Series:

AISM-1008

Type:

Molded

Inductance:

12 nH

Current Rating (Amps):

500 mA

Shielding:

Shielded

Q @ Freq:

15 @ 100MHz

Ratings:

-

Inductance Frequency - Test:

100 MHz

Mounting Type:

Surface Mount

Supplier Device Package:

1008

Height - Seated (Max):

0.075" (1.90mm)

Manufacturer:

Abracon LLC

Product Status:

Active

Material - Core:

-

Tolerance:

±5%

Current - Saturation (Isat):

-

DC Resistance (DCR):

270mOhm Max

Frequency - Self Resonant:

2.05GHz

Operating Temperature:

-40°C ~ 105°C

Features:

-

Package / Case:

1008 (2520 Metric)

Size / Dimension:

0.098" L x 0.079" W (2.50mm x 2.00mm)

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.4000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

# SMD Molded Wound Chip inductor

AIMS-1008



RoHS  
Compliant



2.5 x 2.0 x 1.8mm

FEATURES:

- Highly reliable in sudden temperature and humidity change
- Resistant to mechanical shocks and high temperature
- Accurate dimensions for automatically surface mounted
- Low DCR and High current, suitable for power line application
- Wide range of inductance value

APPLICATIONS:

- xDSL, mobile base stations
- TVs, VCRs, digital cameras
- Automobile audio systems, ECU systems
- HDDs, ODDs

ELECTRICAL SPECIFICATIONS:

PARAMETERS

ABRACON P/N: AIMS-1008-XXX

Operating Temperature: -40°C to + 105°C (Including self-temperature rise)

Storage Temperature: -40°C to + 105°C

Self Temperature Arising: <20°C

Rating Current: When the rating current flows, inductance should not drop more than 10%

Part No.	L (μH)	Tolerance (%)	Q typ.	L, Q (MHz)	SRF (MHz)min.	DCR (Ω) max.	Idc* (mA)max.
AIMS-1008-R01	0.01	J	15	100	2150	0.26	530
AIMS-1008-R012	0.012	J	15	100	2050	0.27	500
AIMS-1008-R015	0.015	J	15	100	2000	0.29	480
AIMS-1008-R018	0.018	J	15	100	1850	0.31	450
AIMS-1008-R022	0.022	J	15	100	1650	0.37	420
AIMS-1008-R027	0.027	J	20	100	1550	0.40	410
AIMS-1008-R033	0.033	J	20	100	1450	0.42	400
AIMS-1008-R039	0.039	J	20	100	1350	0.45	380
AIMS-1008-R047	0.047	J	20	100	1200	0.50	360
AIMS-1008-R056	0.056	J	20	100	1100	0.60	340
AIMS-1008-R068	0.068	J	20	100	1050	0.65	320
AIMS-1008-R082	0.082	J	20	100	900	0.75	300
AIMS-1008-R10	0.1	J	20	100	800	0.80	280
AIMS-1008-R12	0.12	J	30	25.2	700	0.30	550
AIMS-1008-R15	0.15	J	30	25.2	550	0.35	500
AIMS-1008-R18	0.18	J	30	25.2	500	0.40	475
AIMS-1008-R22	0.22	J	30	25.2	450	0.50	450
AIMS-1008-R27	0.27	J	30	25.2	425	0.55	425
AIMS-1008-R33	0.33	J	30	25.2	400	0.60	400
AIMS-1008-R39	0.39	J	30	25.2	375	0.65	375
AIMS-1008-R47	0.47	J	30	25.2	350	0.68	350
AIMS-1008-R56	0.56	J	30	25.2	325	0.75	325
AIMS-1008-R68	0.68	J	30	25.2	300	0.85	300
AIMS-1008-R82	0.82	J	30	25.2	260	1.00	260
AIMS-1008-1R0	1.0	J	30	7.96	245	1.10	245
AIMS-1008-1R2	1.2	J	30	7.96	230	1.20	230



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# SMD Molded Wound Chip inductor



2.5 x 2.0 x 1.8mm

AIMS-1008



RoHS  
Compliant

Part No.	L ( $\mu$ H)	Tolerance (%)	Q typ.	Test Freq. L, Q (MHz)	SRF (MHz)min.	DCR ( $\Omega$ ) max.	Idc* (mA)max.
AIMS-1008-1R5	1.5	J	30	7.96	182	1.30	220
AIMS-1008-1R8	1.8	J	30	7.96	135	1.45	210
AIMS-1008-2R2	2.2	J	30	7.96	105	1.55	200
AIMS-1008-2R7	2.7	J	30	7.96	70	1.70	195
AIMS-1008-3R3	3.3	J	30	7.96	55	1.90	185
AIMS-1008-3R9	3.9	J	30	7.96	48	2.1	180
AIMS-1008-4R7	4.7	J	30	7.96	43	2.3	175
AIMS-1008-5R6	5.6	J	25	7.96	42	2.5	170
AIMS-1008-6R8	6.8	J	25	7.96	39	2.7	165
AIMS-1008-8R2	8.2	J	25	7.96	36	3.05	160
AIMS-1008-100	10	J	25	2.52	33	3.5	155
AIMS-1008-120	12	J	25	2.52	30	3.8	150
AIMS-1008-150	15	J	25	2.52	26	4.4	140
AIMS-1008-180	18	J	25	2.52	24	4.8	130
AIMS-1008-220	22	J	25	2.52	22	5.5	125
AIMS-1008-270	27	J	25	2.52	21	6.3	115
AIMS-1008-330	33	J	25	2.52	20	7.1	110
AIMS-1008-390	39	J	20	2.52	18	9.5	90
AIMS-1008-470	47	J	20	2.52	17	11.1	80
AIMS-1008-560	56	J	20	2.52	16	12.1	75
AIMS-1008-680	68	J	20	2.52	15	16.6	70
AIMS-1008-820	82	J	20	2.52	13	19.0	66
AIMS-1008-101	100	J	15	0.796	12	21.0	60

**Note:**

Tolerance : J=±5%;

\* Rated current: Value obtained when current flows and the temperature has risen to 20°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

## OPTIONS AND PART IDENTIFICATION

AIMS -1008 - □□□J - □

**Inductance**  
Please refer to the tables on page 2.

**Packaging**

T	Tape and Reel
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# SMD Molded Wound Chip inductor



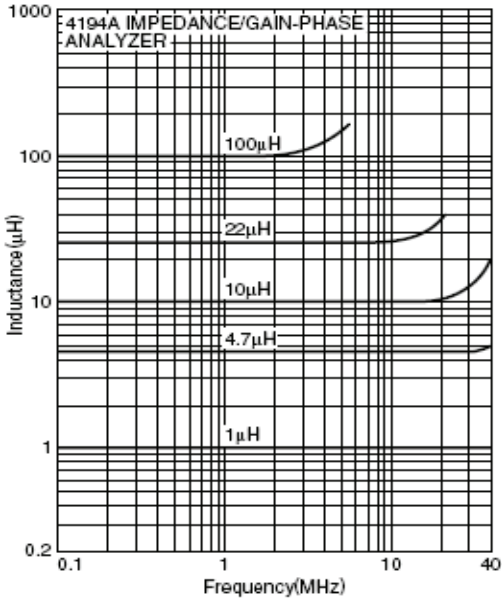
2.5 x 2.0 x 1.8mm

AIMS-1008

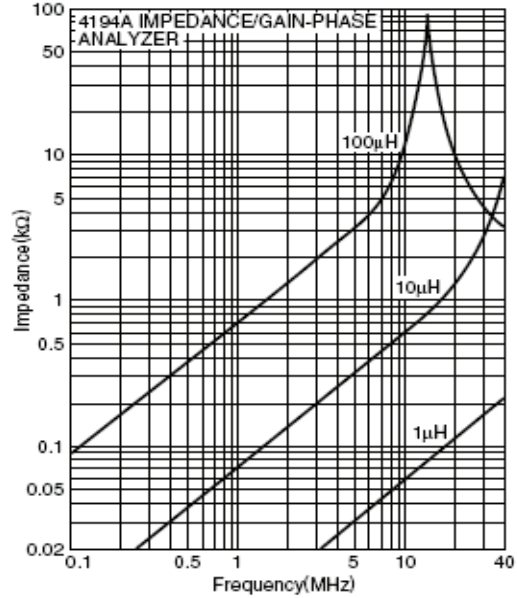


TEST PLOTS:

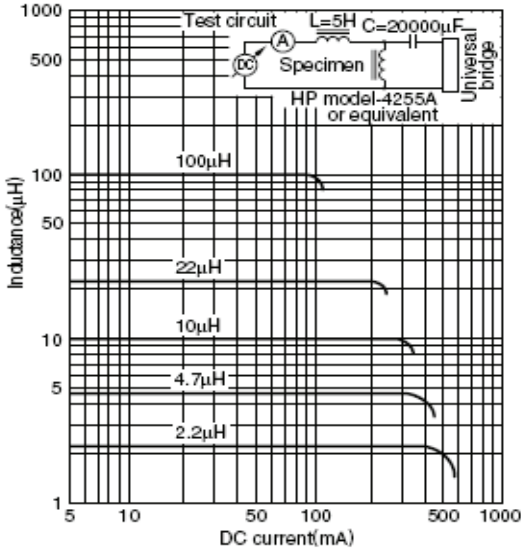
INDUCTANCE vs. FREQUENCY CHARACTERISTICS



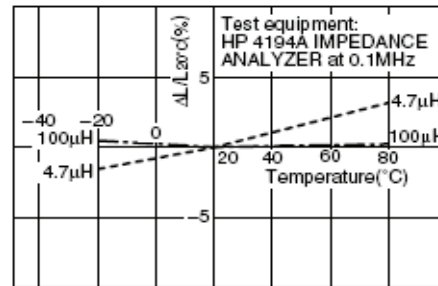
IMPEDANCE vs. FREQUENCY CHARACTERISTICS



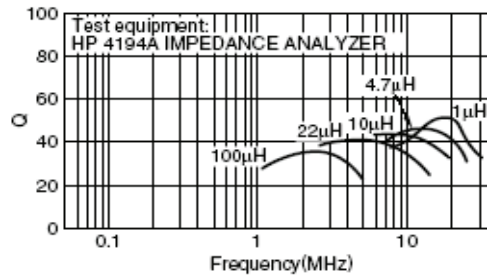
INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



INDUCTANCE CHANGE vs. TEMPERATURE CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS



# SMD Molded Wound Chip inductor

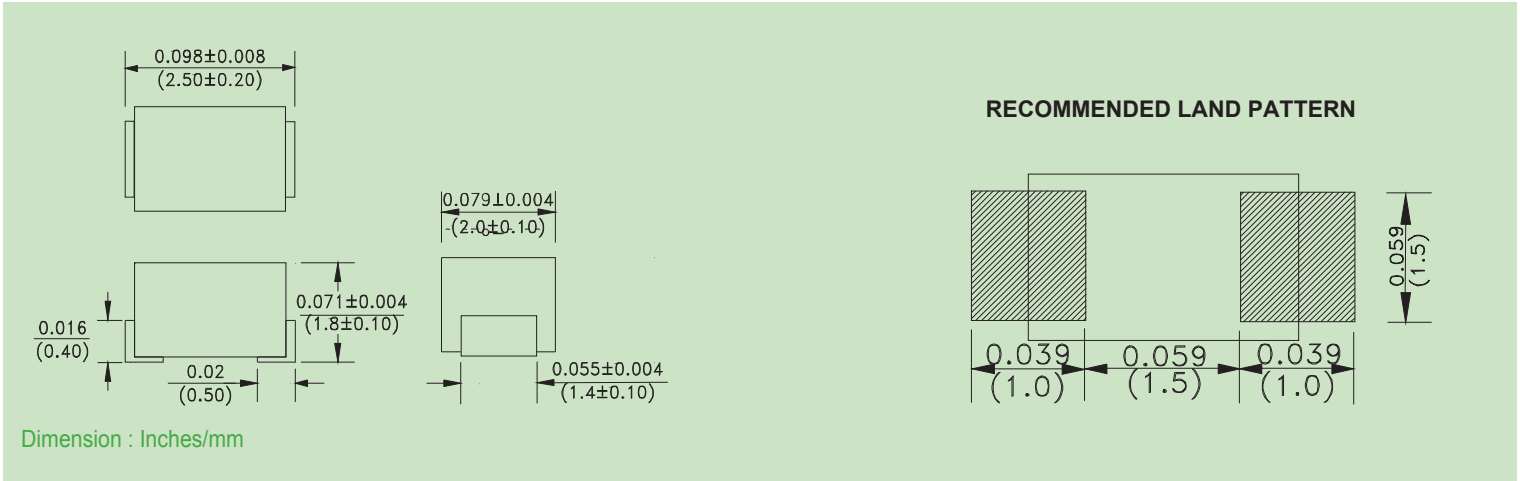


2.5 x 2.0 x 1.8mm

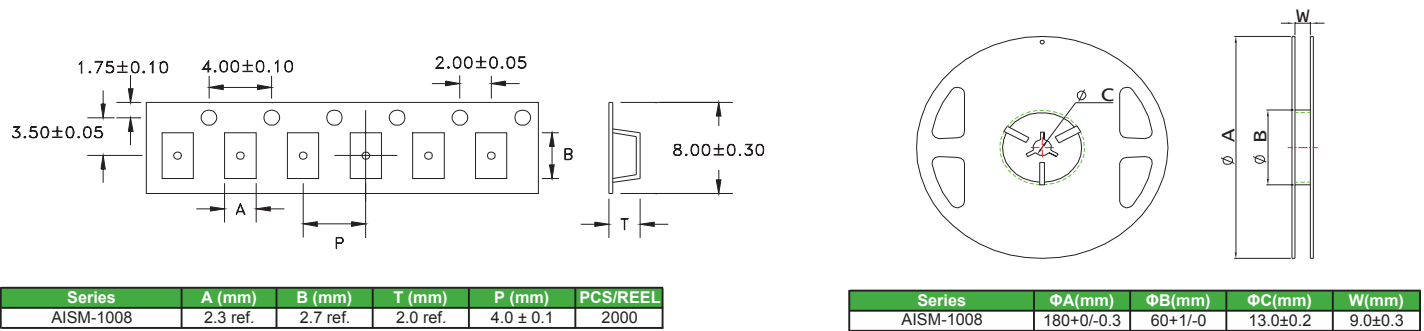
AIMS-1008



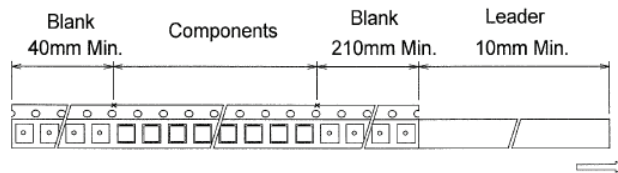
## OUTLINE DRAWING:



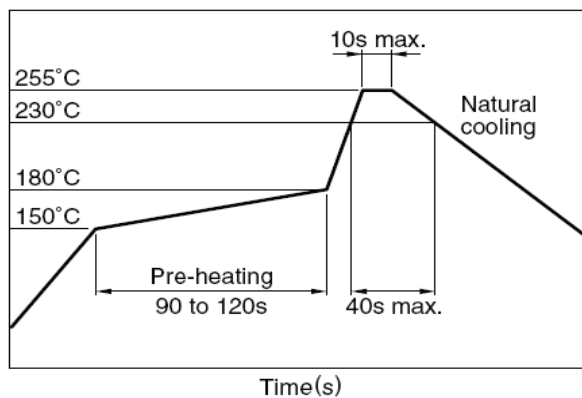
## TAPE & REEL:



Dimension: mm



## REFLOW PROFILE:



**NOTE:** Abracon manufactured products are intended for general commercial and industrial use. For applications requiring high reliability and/or presenting extreme operating environment, written consent & authorization from Abracon is required.

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