

### AIAC-1812-56NJ-T Datasheet



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DiGi Electronics Part Number AIAC-1812-56NJ-T-DG

Manufacturer Abracon LLC

Manufacturer Product Number AIAC-1812-56NJ-T

Description FIXED IND 56NH 2.9A 6.4 MOHM SMD

**Detailed Description** 56 nH Unshielded Wirewound Inductor 2.9 A 6.4mO

hm Max Nonstandard



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DiGi is a global authorized distributor of electronic components.



### **Purchase and inquiry**

Manufacturer Product Number:	Manufacturer:
AIAC-1812-56NJ-T	Abracon LLC
Series:	Product Status:
AIAC-1812	Active
Type:	Material - Core:
Wirewound	Air
Inductance:	Tolerance:
56 nH	±5%
Current Rating (Amps):	Current - Saturation (Isat):
2.9 A	
Shielding:	DC Resistance (DCR):
Unshielded	6.4mOhm Max
Q @ Freq:	Frequency - Self Resonant:
100 @ 150MHz	1.5GHz
Ratings:	Operating Temperature:
	-40°C ~ 125°C
Inductance Frequency - Test:	Mounting Type:
150 MHz	Surface Mount
Package / Case:	Supplier Device Package:
Nonstandard	
Size / Dimension:	Height - Seated (Max):
0.185" L x 0.138" W (4.70mm x 3.50mm)	0.146" (3.70mm)

### **Environmental & Export classification**

8504.50.8000

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	

AIAC-1812

RoHS **Compliant** 



4.7 x 3.5 x 3.5mm

#### > FEATURES:

- High current design
- Wide Range Frequency Response
- Excellent Q & SRF
- Standard flat cap top suitable for automatic placement.

#### > APPLICATIONS:

- Widely used in Cordless Phones, High Frequency Communication Equipments, Intercom, CATV, RFID
- Suitable for metal sensors and proximity sensors
- Noise suppression for RF power supply/bias
- I/O filtering, frequency selection for audio devices such as Loudspeakers, Hifi
- Impedance Matching for transceivers
- Improves switch isolation for RF circuit

### > STANDARD SPECIFICATIONS:

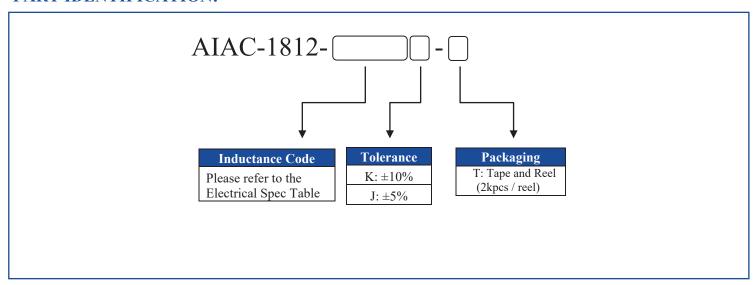
PARAMETERS	
ABRACON P/N:	AIAC-1812
Operating temperature:	-40 °C ~ +125 °C
Storage temperature:	-25°C to + 60°C

Part Number	Inductance	Tolerance	DCR (Max)	Q(Min)	SRF(Min)	Rated Current (Max)	Inductance Code
Units	nH	%	m $\Omega$		GHz	A	
Symbol	L	J, K	DCR			IDC	
AIAC-1812-22N	22	K	4.8	100.0	3.20	3.2	22NK
AIAC-1812-27N	27	K	4.6	100.0	2.70	3.5	27NK
AIAC-1812-33N	33	K	5.9	100.0	2.50	3.0	33NK
AIAC-1812-39N	39	J	5.6	100.0	2.10	2.8	39NJ
AIAC-1812-47N	47	J	6.9	100.0	2.10	2.8	47NJ
AIAC-1812-56N	56	J	6.4	100.0	1.50	2.9	56NJ
AIAC-1812-68N	68	J	8.1	100.0	1.50	2.9	68NJ
AIAC-1812-82N	82	J	8.9	100.0	1.30	2.6	82NJ
AIAC-1812-R10	100	J	10.0	100.0	1.20	2.5	R10J
AIAC-1812-R12	120	J	11.1	100.0	1.10	2.2	R12J

### **Test Conditions and equipments**

Test frequency: 150MHz Equipment: HP4191A

### > PART IDENTIFICATION:



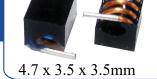


REVISED: 11/09/2020 5101 Hidden Creek Lane Spicewood TX 78669 ABRACON IS

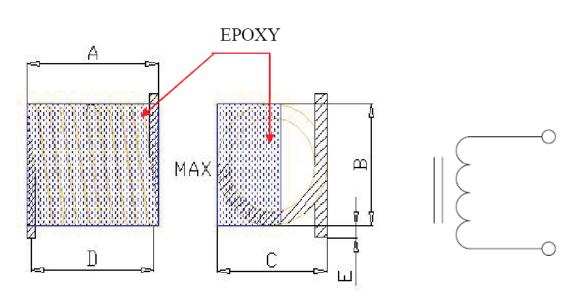
ISO9001-20 CERTIFIED

AIAC-1812

RoHS Compliant

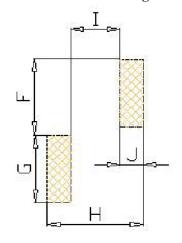


### > OUTLINE DRAWING:



Inductance code	A	В	C	D	E
All others	4.7±0.3	3.5±0.2	3.5±0.2	4.2+0.4	1.0±0.3
R12J only	4.9±0.3	3.8±0.2	3.8±0.2	4.3±0.4	

### **Recommended Landing Pattern**



F	G	Н	I	J
2.7	5.2	5.8	2.9	1.5

Dimension: inch (mm)



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

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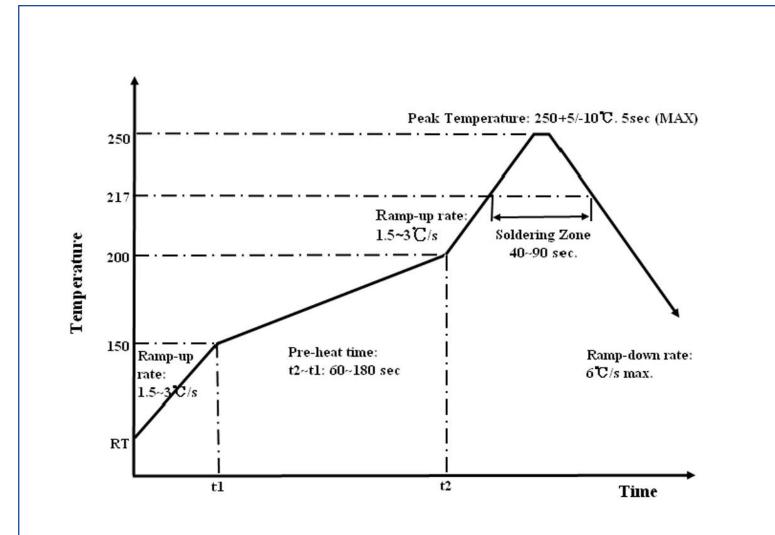
ABRACON IS ISO9001-2015 CERTIFIED

AIAC-1812

**RoHS** Compliant



### > REFLOW PROFILE:



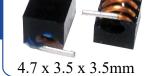


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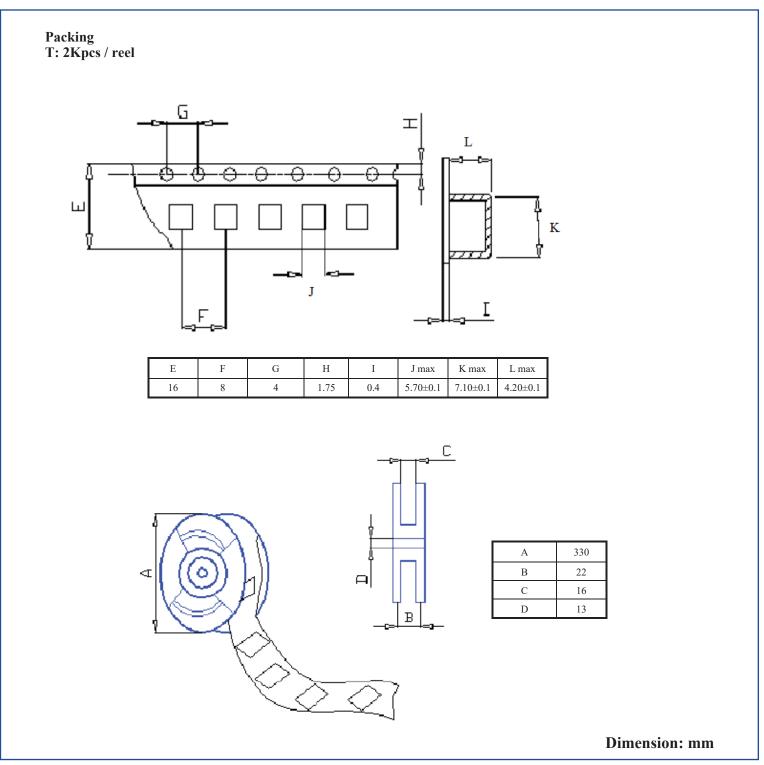
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AIAC-1812

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#### > TAPE & REEL:



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