

AIAC-1008C-82NK-T Datasheet



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

| | |
|------------------------------|---|
| DiGi Electronics Part Number | AIAC-1008C-82NK-T-DG |
| Manufacturer | Abracon LLC |
| Manufacturer Product Number | AIAC-1008C-82NK-T |
| Description | FIXED IND 82NH 320MA 51.5MOHM SM |
| Detailed Description | 82 nH Unshielded Wirewound Inductor 320 mA 51.5mOhm Max Nonstandard |



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DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

AIAC-1008C-82NK-T

Series:

AIAC-1008C

Type:

Wirewound

Inductance:

82 nH

Current Rating (Amps):

320 mA

Shielding:

Unshielded

Q @ Freq:

70 @ 300MHz

Ratings:

-

Inductance Frequency - Test:

300 MHz

Package / Case:

Nonstandard

Size / Dimension:

0.126" L x 0.075" W (3.20mm x 1.90mm)

Manufacturer:

Abracon LLC

Product Status:

Obsolete

Material - Core:

Air

Tolerance:

±10%

Current - Saturation (Isat):

-

DC Resistance (DCR):

51.5mOhm Max

Frequency - Self Resonant:

1GHz

Operating Temperature:

-40°C ~ 125°C

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.087" (2.20mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.8000

Moisture Sensitivity Level (MSL):

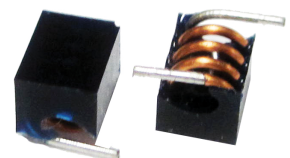
1 (Unlimited)

ECCN:

EAR99

SMT Air Coil Inductor

AIAC-1008C


RoHS
Compliant


3.20 x 1.90 x 2.20mm

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:

| | |
|------------------------|------------------|
| ABRACON P/N: | AIAC-1008C |
| Operating temperature: | -40 °C ~ +125 °C |
| Storage temperature: | -25°C to + 60°C |

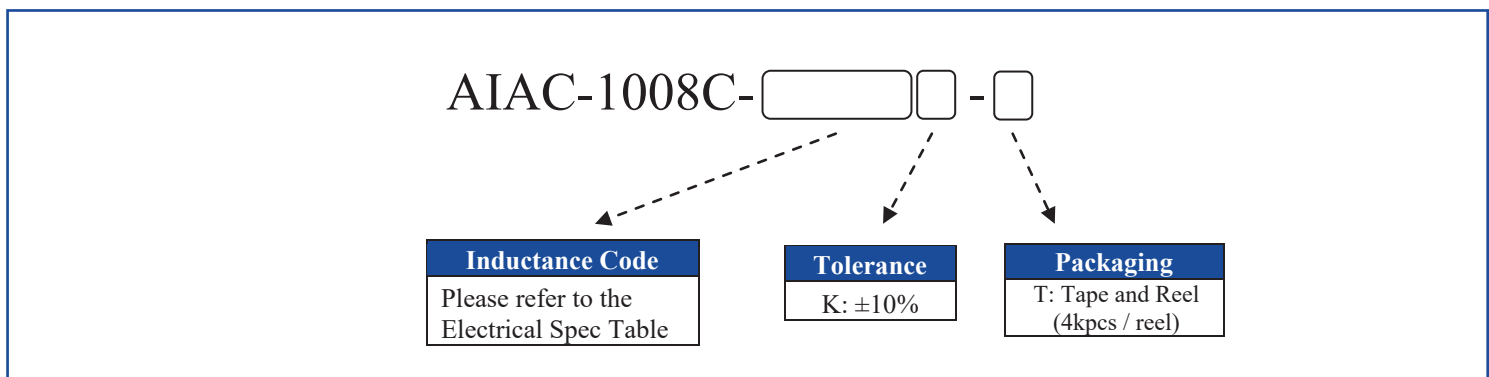
| Part Number | Inductance | Tolerance | DCR (Max) | Q(Min) | SRF(Min) | Rated Current (Max) | Inductance Code |
|----------------|------------|-----------|-----------|--------|----------|---------------------|-----------------|
| Units | nH | % | mΩ | | MHz | mA | |
| Symbol | L | K | DCR | | | IDC | |
| AIAC-1008C-6N8 | 6.8 | K | 4.0 | 80 | >3000 | 1200 | 6N8 |
| AIAC-1008C-8N2 | 8.2 | K | 5.0 | 80 | >3000 | 950 | 8N2 |
| AIAC-1008C-10N | 10 | K | 6.0 | 70 | >3000 | 950 | 10N |
| AIAC-1008C-12N | 12 | K | 6.5 | 70 | >3000 | 900 | 12N |
| AIAC-1008C-15N | 15 | K | 7.3 | 70 | 2500 | 900 | 15N |
| AIAC-1008C-18N | 18 | K | 9.6 | 70 | 2500 | 840 | 18N |
| AIAC-1008C-22N | 22 | K | 10.8 | 70 | 2400 | 840 | 22N |
| AIAC-1008C-27N | 27 | K | 13.9 | 70 | 1600 | 600 | 27N |
| AIAC-1008C-33N | 33 | K | 19.5 | 70 | 1600 | 500 | 33N |
| AIAC-1008C-39N | 39 | K | 21.6 | 70 | 1500 | 500 | 39N |

Test Conditions and equipments

Test frequency: 300MHz

Equipment: HP4286A/HP16191A

PART IDENTIFICATION:

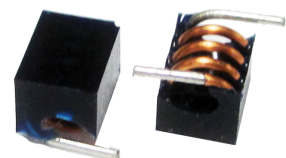


SMT Air Coil Inductor

AIAC-1008C

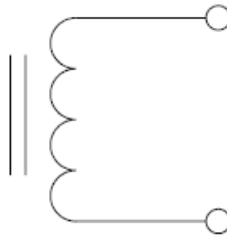
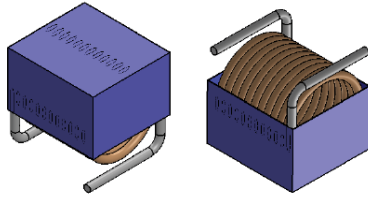
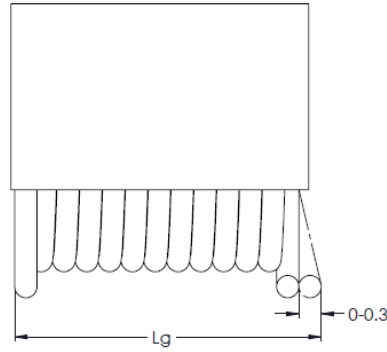
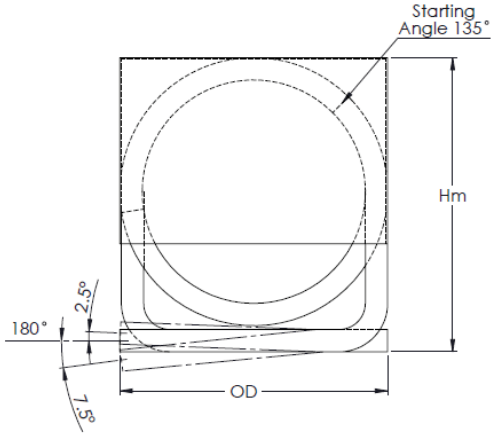


RoHS
Compliant



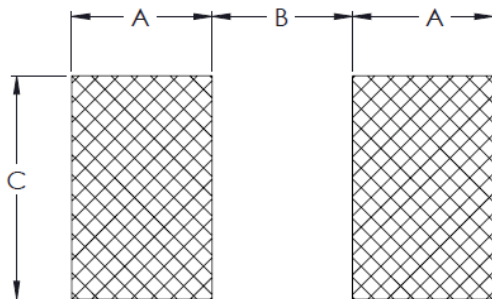
3.20 x 1.90 x 2.20mm

OUTLINE DRAWING:



| | |
|-----------|----------|
| Hm | 2.20 Max |
| OD | 1.90 Max |
| Lg | 3.20 Max |

Recommended Land Pattern



| | |
|----------|----------|
| A | 1.02 Min |
| B | 1.27 Min |
| C | 2.54 Min |

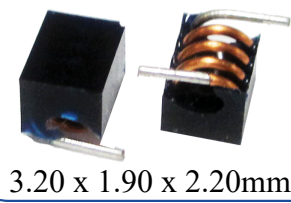
Dimension: mm

SMT Air Coil Inductor

AIAC-1008C

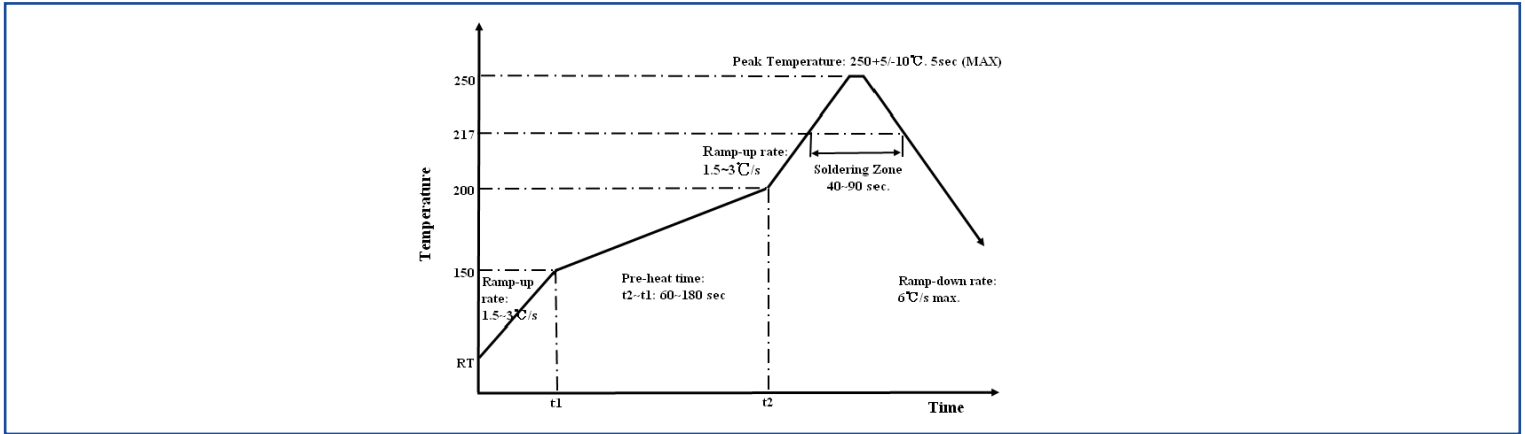


RoHS
Compliant



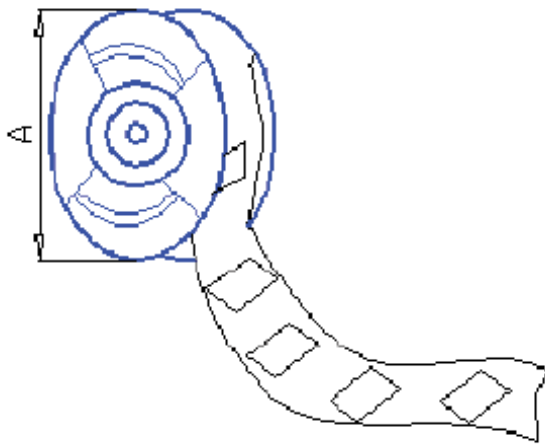
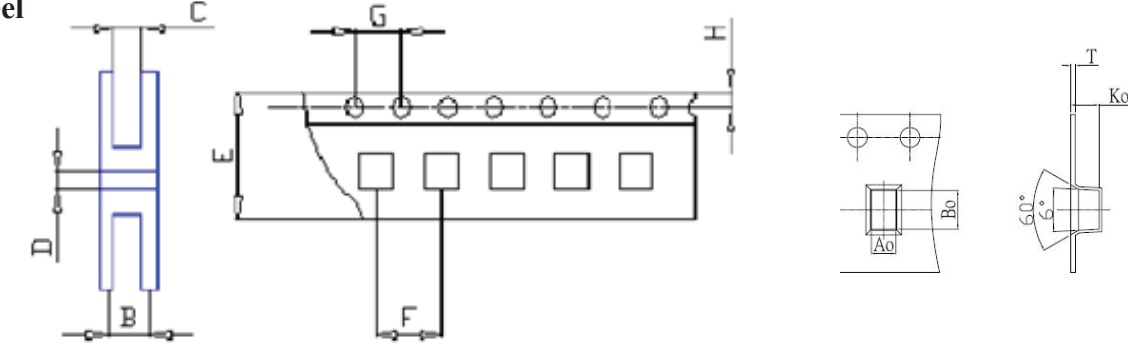
3.20 x 1.90 x 2.20mm

REFLOW PROFILE:



TAPE & REEL:

Packing
T: 4,000pcs / reel



| | |
|----|----------|
| Ao | 2.3±0.10 |
| Bo | 3.4±0.10 |
| Ko | 2.3±0.10 |
| A | 330 |
| B | 18 |
| C | 12 |
| D | 13 |
| E | 12 |
| F | 8.0 |
| G | 4.0 |
| H | 1.75 |
| T | 0.35 |

Dimension: mm

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