

WIRE WOUND INDUCTOR - CERAMIC or FERRITE

AISC-1008(F)



RoHS
Compliant



2.92 x 2.79 x 2.29mm

FEATURES:

- Ceramic or Ferrite Construction assures the utmost in the thermal stability and high SRF
- Exceptionally high Q compared to non-wirewound inductor, especially at high frequencies
- Inductance values available from 4.7 nH to 10,000nH

APPLICATIONS:

- Widely applied in the VCO, SAW circuit for GSM, CDMA communications
- Used in hard disk, notebook computer and other electronic equipment

STANDARD SPECIFICATIONS:

| Abracon Part Number | L (nH) | L. Test | | Q Min | Q Test Freq (MHz) | SRF Min (MHz) | R _{DC} Max (Ω) | I _{bc} Max (mA) |
|---------------------|---------|------------|----------------|-------|-------------------|---------------|-------------------------|--------------------------|
| | | Freq (MHz) | Tolerance (±%) | | | | | |
| AISC-1008-R0047 | 4.7 | 50 | 10.2 0 | 60 | 150 0 | >600 0 | 0.11 | 1000 |
| AISC-1008-R010 | 10 | 50 | 5.10,2 0 | 50 | 500 | 410 0 | 0.08 | 1000 |
| AISC-1008-R012 | 12 | 50 | 5.10,2 0 | 50 | 500 | 340 0 | 0.09 | 1000 |
| AISC-1008-R015 | 15 | 50 | 5.10,2 0 | 50 | 500 | 260 0 | 0.13 | 1000 |
| AISC-1008-R018 | 18 | 50 | 5.10,2 0 | 50 | 350 | 260 0 | 0.11 | 1000 |
| AISC-1008-R022 | 22 | 50 | 2.5,10,2 0 | 55 | 350 | 240 0 | 0.12 | 1000 |
| AISC-1008-R027 | 27 | 50 | 2.5,10,2 0 | 55 | 350 | 170 0 | 0.13 | 1000 |
| AISC-1008-R033 | 33 | 50 | 2.5,10,2 0 | 60 | 350 | 170 0 | 0.14 | 1000 |
| AISC-1008-R039 | 39 | 50 | 2.5,10,2 0 | 60 | 350 | 160 0 | 0.15 | 1000 |
| AISC-1008-R047 | 47 | 50 | 2.5,10,2 0 | 70 | 350 | 160 0 | 0.16 | 1000 |
| AISC-1008-R056 | 56 | 50 | 2.5,10,2 0 | 70 | 350 | 140 0 | 0.18 | 1000 |
| AISC-1008-R068 | 68 | 50 | 2.5,10,2 0 | 65 | 350 | 120 0 | 0.21 | 1000 |
| AISC-1008-R082 | 82 | 50 | 2.5,10,2 0 | 65 | 350 | 100 0 | 0.22 | 1000 |
| AISC-1008-R10 | 100 | 25 | 2.5,10,2 0 | 60 | 350 | 100 0 | 0.56 | 650 |
| AISC-1008-R12 | 120 | 25 | 2.5,10,2 0 | 60 | 350 | 100 0 | 0.63 | 650 |
| AISC-1008-R15 | 150 | 25 | 2.5,10,2 0 | 45 | 100 | 85 0 | 0.62 | 580 |
| AISC-1008-R18 | 180 | 25 | 2.5,10,2 0 | 45 | 100 | 80 0 | 0.70 | 620 |
| AISC-1008-R22 | 220 | 25 | 2.5,10,2 0 | 45 | 100 | 70 0 | 0.80 | 500 |
| AISC-1008-R27 | 270 | 25 | 2.5,10,2 0 | 45 | 100 | 70 0 | 0.91 | 500 |
| AISC-1008-R33 | 330 | 25 | 2.5,10,2 0 | 45 | 100 | 60 0 | 1.05 | 450 |
| AISC-1008-R39 | 390 | 25 | 2.5,10,2 0 | 45 | 100 | 50 0 | 1.12 | 470 |
| AISC-1008-R47 | 470 | 25 | 2.5,10,2 0 | 45 | 100 | 50 0 | 1.19 | 470 |
| AISC-1008-R56 | 560 | 25 | 2.5,10,2 0 | 45 | 100 | 45 0 | 1.33 | 400 |
| AISC-1008-R62 | 620 | 25 | 2.5,10,2 0 | 45 | 100 | 41 5 | 1.40 | 300 |
| AISC-1008-R68 | 680 | 25 | 2.5,10,2 0 | 45 | 100 | 37 5 | 1.47 | 400 |
| AISC-1008-R75 | 750 | 25 | 2.5,10,2 0 | 45 | 100 | 36 0 | 1.54 | 360 |
| AISC-1008-R82 | 820 | 25 | 2.5,10,2 0 | 45 | 100 | 35 0 | 1.61 | 400 |
| AISC-1008-R91 | 910 | 25 | 2.5,10,2 0 | 40 | 50 | 32 0 | 1.68 | 380 |
| AISC-1008-1R0 | 1.00 0 | 25 | 2.5,10,2 0 | 35 | 50 | 29 0 | 1.75 | 370 |
| AISC-1008-1R2 | 1.20 0 | 7.9 | 2.5,10,2 0 | 35 | 50 | 25 0 | 2.00 | 310 |
| AISC-1008-1R5 | 1.50 0 | 7.9 | 2.5,10,2 0 | 28 | 50 | 20 0 | 2.30 | 330 |
| AISC-1008-1R8 | 1.80 0 | 7.9 | 2.5,10,2 0 | 28 | 50 | 16 0 | 2.60 | 300 |
| AISC-1008-2R2 | 2.20 0 | 7.9 | 2.5,10,2 0 | 28 | 50 | 12 0 | 2.80 | 280 |
| AISC-1008-2R7 | 2.70 0 | 7.9 | 2.5,10,2 0 | 22 | 25 | 10 0 | 3.20 | 290 |
| AISC-1008-3R3 | 3.30 0 | 7.9 | 2.5,10,2 0 | 22 | 25 | 8 0 | 3.40 | 260 |
| AISC-1008-3R9 | 3.90 0 | 7.9 | 2.5,10,2 0 | 20 | 25 | 6 0 | 3.60 | 260 |
| AISC-1008-4R7 | 4.70 0 | 7.9 | 2.5,10,2 0 | 20 | 25 | 6 0 | 4.00 | 250 |
| AISC-1008-5R6 | 5.60 0 | 7.9 | 5.10,2 0 | 20 | 25 | 6 0 | 5.70 | 220 |
| AISC-1008-6R8 | 6.80 0 | 7.9 | 5.10,2 0 | 20 | 25 | 6 0 | 7.70 | 180 |
| AISC-1008-8R2 | 8.20 0 | 7.9 | 5.10,2 0 | 20 | 25 | 5 0 | 10.7 | 150 |
| AISC-1008F-1R2 | 1.20 0 | 7.9 | 5.10,20 | 48 | 50 | 21 0 | 0.70 | 650 |
| AISC-1008F-1R5 | 1.50 0 | 7.9 | 5.10,20 | 41 | 50 | 19 0 | 0.75 | 630 |
| AISC-1008F-1R8 | 1.80 0 | 7.9 | 5.10,20 | 39 | 50 | 17 0 | 0.84 | 600 |
| AISC-1008F-2R2 | 2.20 0 | 7.9 | 5.10,20 | 34 | 50 | 15 0 | 1.15 | 520 |
| AISC-1008F-2R7 | 2.70 0 | 7.9 | 5.10,20 | 34 | 50 | 10 0 | 1.28 | 490 |
| AISC-1008F-3R3 | 3.30 0 | 7.9 | 5.10,20 | 32 | 50 | 10 0 | 1.46 | 450 |
| AISC-1008F-3R9 | 3.90 0 | 7.9 | 5.10,20 | 32 | 7.9 | 7 0 | 1.56 | 420 |
| AISC-1008F-4R7 | 4.70 0 | 7.9 | 5.10,20 | 31 | 7.9 | 6 0 | 1.68 | 400 |
| AISC-1008F-5R6 | 5.60 0 | 7.9 | 5.10,20 | 23 | 7.9 | 5 0 | 1.82 | 380 |
| AISC-1008F-6R8 | 6.80 0 | 7.9 | 5.10,20 | 31 | 7.9 | 4 0 | 2.00 | 360 |
| AISC-1008F-8R2 | 8.20 0 | 7.9 | 5.10,20 | 23 | 7.9 | 4 0 | 2.65 | 330 |
| AISC-1008F-100 | 10.00 0 | 7.9 | 5.10,20 | 31 | 7.9 | 4 0 | 2.95 | 300 |

PARAMETERS

ABRACON P/N:
AISC-1008(F)-xxx

Operating temperature:
-40°C to + 125°C

Storage temperature:
-10°C to + 40°C, 70% RH max.

Test Equipment:

1. Inductance and Q-factor measured using HP4287A and 16197 Testing Fixture.
2. R_{dc} measured using a Agilent 4287A with 16197 test fixture
3. SRF measured using Agilent E5071B network Analyzer

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Revised: 04.18.11

WIRE WOUND INDUCTOR - CERAMIC or FERRITE



2.92 x 2.79 x 2.29mm

AISC-1008(F)



OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

AISC-1008 - - -

| Material Code |
|----------------|
| Blank: Ceramic |
| F: Ferrite |

| Inductance Code |
|---------------------------|
| Please refer to the table |

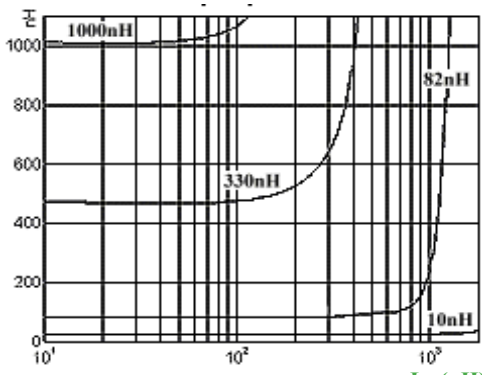
| Tolerance Code |
|----------------|
| G: ±2% |
| J: ±5% |
| K: ±10% |
| M: ±20% |

| Terminal Option |
|-----------------|
| Blank: Tin-Ni |
| Z: Au-Ni |

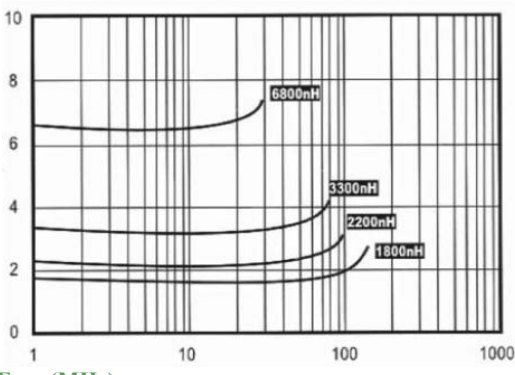
| Packaging |
|----------------|
| T: Tape & Reel |

ELECTRICAL PROPERTIES:

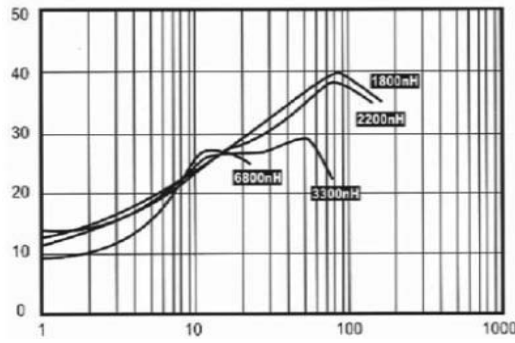
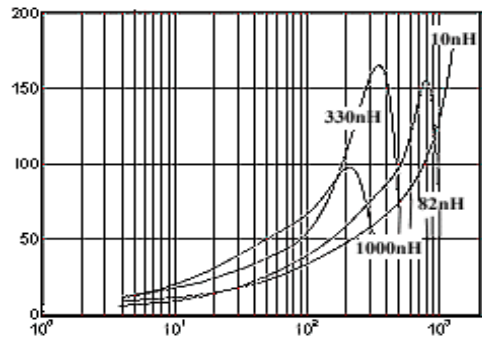
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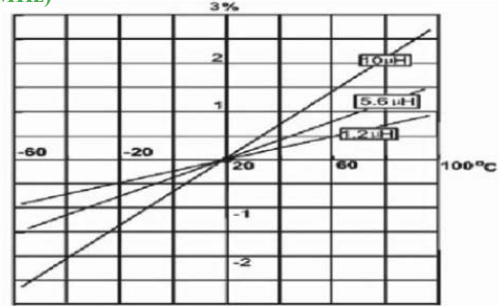
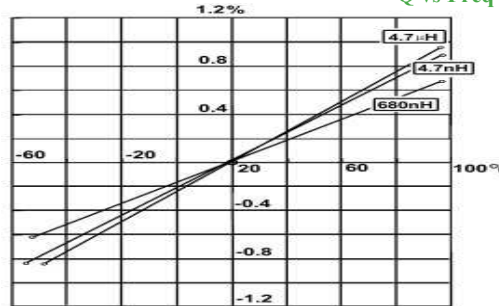
AISC-1008(F):



Ls (nH) vs Freq (MHz)



Q vs Freq (MHz)



Temperature Characteristic

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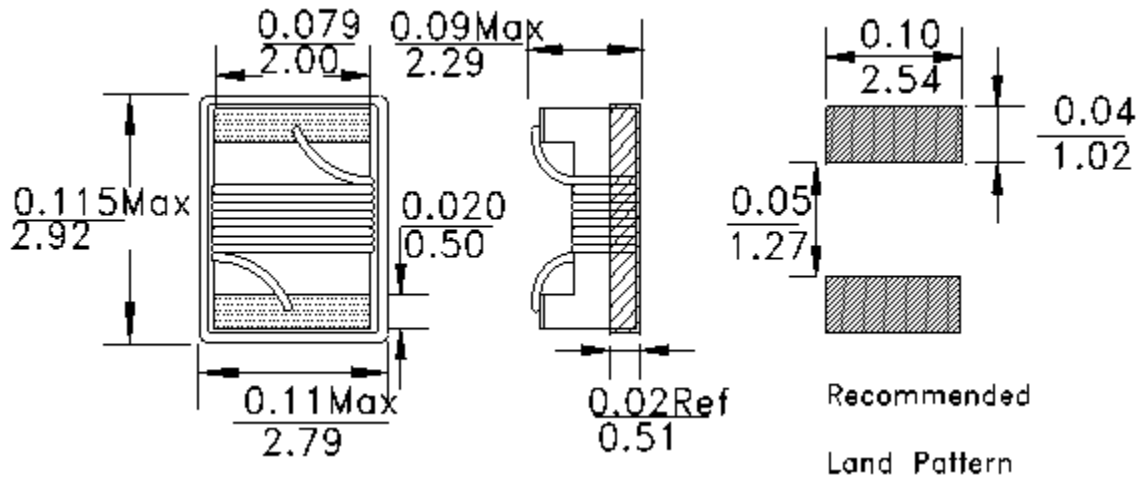


2.92 x 2.79 x 2.29mm

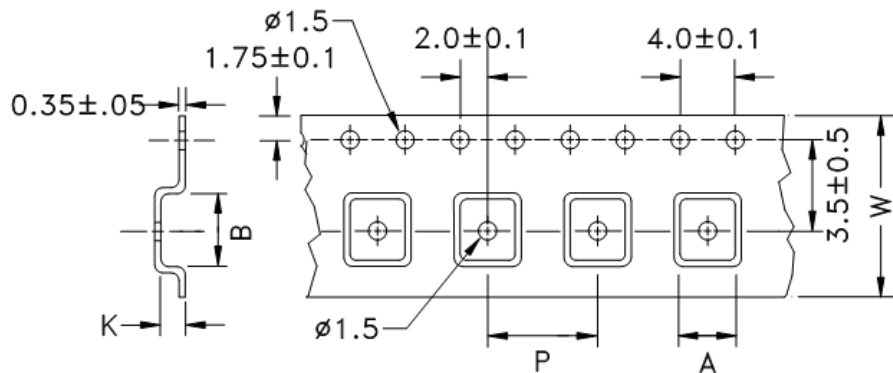
AISC-1008(F)

Pb | **RoHS**
Compliant

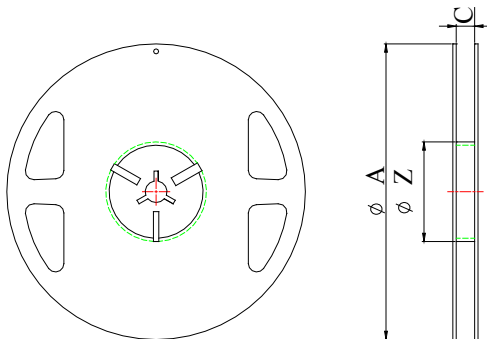
OUTLINE DRAWING:



TAPE & REEL: Tape and reel 2,000pcs/reel



| ABRACON P/N | A (mm) | B (mm) | K (mm) | P (mm) | W (mm) | PCS/REEL |
|--------------|--------|--------|--------|--------|--------|----------|
| AISC-1008(F) | 2.9 | 3.1 | 2.31 | 4 | 8 | 2,000 |



| Series | A | C | Z |
|--------------|---------|---------|--------|
| AISC-1008(F) | 178±2.0 | 8.4±1.5 | 60±1.0 |

Dimensions: mm

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