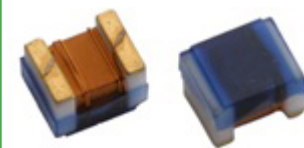


WIRE WOUND INDUCTOR - CERAMIC or FERRITE



2.29 x 1.73 x 1.55mm

AISC-0805(F)



RoHS/RoHS II compliant

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 2.2 nH to 68uH; tight tolerance

APPLICATIONS:

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

STANDARD SPECIFICATIONS:

| Part Number | L(nH) @Test Freq. | Tolerance (±%) | Q, Min @Test Freq. | SRF Min (MHz) | R _{DC} Max (Ω) | I _{DC} Max (mA) |
|-----------------|----------------------|-------------------|-----------------------|------------------|----------------------------|-----------------------------|
| AISC-0805-R0022 | 2.2 @ 250 MHz | 10,20 | 40 @ 1500 MHz | >6000 | 0.10 | 600 |
| AISC-0805-R0033 | 3.3 @ 250 MHz | 5,10,20 | 30 @ 1500 MHz | >6000 | 0.08 | 600 |
| AISC-0805-R0068 | 6.8 @ 250 MHz | 5,10,20 | 40 @ 1000 MHz | 5000 | 0.11 | 600 |
| AISC-0805-R0082 | 8.2 @ 250 MHz | 5,10,20 | 40 @ 1000 MHz | 4600 | 0.19 | 600 |
| AISC-0805-R012 | 12 @ 250 MHz | 2,5,10,20 | 40 @ 500 MHz | 4000 | 0.15 | 600 |
| AISC-0805-R015 | 15 @ 250 MHz | 5,10,20 | 40 @ 500 MHz | 2900 | 0.17 | 600 |
| AISC-0805-R018 | 18 @ 250 MHz | 2,5,10,20 | 50 @ 500 MHz | 3300 | 0.20 | 600 |
| AISC-0805-R022 | 22 @ 250 MHz | 2,5,10,20 | 55 @ 500 MHz | 2000 | 0.22 | 500 |
| AISC-0805-R027 | 27 @ 250 MHz | 2,5,10,20 | 55 @ 500 MHz | 2500 | 0.25 | 500 |
| AISC-0805-R033 | 33 @ 250 MHz | 2,5,10,20 | 60 @ 500MHz | 2000 | 0.27 | 500 |
| AISC-0805-R039 | 39 @ 250 MHz | 2,5,10,20 | 60 @ 500MHz | 2000 | 0.29 | 500 |
| AISC-0805-R047 | 47 @ 200 MHz | 2,5,10,20 | 50 @ 500MHz | 1600 | 0.31 | 500 |
| AISC-0805-R056 | 56 @ 200 MHz | 2,5,10,20 | 55 @ 500MHz | 1550 | 0.32 | 500 |
| AISC-0805-R068 | 68 @ 200 MHz | 2,5,10,20 | 55 @ 500MHz | 1450 | 0.38 | 500 |
| AISC-0805-R082 | 82 @ 150 MHz | 2,5,10,20 | 50 @ 500MHz | 1300 | 0.42 | 400 |
| AISC-0805-R10 | 100 @ 150 MHz | 2,5,10,20 | 50 @ 500MHz | 1200 | 0.46 | 400 |
| AISC-0805-R12 | 120 @ 150 MHz | 2,5,10,20 | 50 @ 250 MHz | 1100 | 0.51 | 400 |
| AISC-0805-R15 | 150 @ 100 MHz | 2,5,10,20 | 50 @ 250 MHz | 920 | 0.56 | 400 |
| AISC-0805-R18 | 180 @ 100 MHz | 2,5,10,20 | 50 @ 250 MHz | 870 | 0.64 | 400 |
| AISC-0805-R22 | 220 @ 100 MHz | 2,5,10,20 | 45 @ 250 MHz | 850 | 1.10 | 400 |
| AISC-0805-R27 | 270 @ 100 MHz | 2,5,10,20 | 38 @ 250 MHz | 650 | 1.00 | 350 |
| AISC-0805-R33 | 330 @ 100 MHz | 2,5,10,20 | 40 @ 250 MHz | 600 | 1.4 | 310 |
| AISC-0805-R39 | 390 @ 100 MHz | 2,5,10,20 | 35 @ 250 MHz | 560 | 1.5 | 290 |
| AISC-0805-R47 | 470 @ 50 MHz | 5,10,20 | 33 @ 100 MHz | 375 | 1.72 | 250 |
| AISC-0805-R56 | 560 @ 25 MHz | 5,10,20 | 23 @ 50 MHz | 320 | 1.9 | 230 |
| AISC-0805-R62 | 620 @ 25 MHz | 5,10,20 | 23 @ 50 MHz | 280 | 1.95 | 200 |
| AISC-0805-R68 | 680 @ 25 MHz | 5,10,20 | 23 @ 50 MHz | 270 | 2.05 | 190 |
| AISC-0805-R75 | 750 @ 25 MHz | 5,10,20 | 23 @ 50 MHz | 240 | 2.1 | 180 |
| AISC-0805-R82 | 820 @ 25 MHz | 5,10,20 | 23 @ 50 MHz | 250 | 2.3 | 180 |
| AISC-0805-R91 | 910 @ 25 MHz | 5,10,20 | 22 @ 50 MHz | 230 | 2.4 | 160 |
| AISC-0805-1R0 | 1000 @ 25 MHz | 5,10,20 | 20 @ 50 MHz | 200 | 2.5 | 150 |
| AISC-0805F-R27 | 270@25MHz | 5,10,20 | 15@25MHz | 550 | 0.91 | 350 |
| AISC-0805F-R47 | 470@100MHz | 5,10,20 | 8@100MHz | 500 | 0.72 | 300 |
| AISC-0805F-R56 | 560@25MHz | 5,10,20 | 15@25MHz | 360 | 0.6 | 145 |
| AISC-0805F-1R0 | 1000@7.9MHz | 2,5,10,20 | 15@7.9MHz | 63 | 1.20 | 245 |
| AISC-0805F-1R5 | 1500@7.9MHz | 2,5,10,20 | 15@7.9MHz | 60 | 1.45 | 225 |
| AISC-0805F-1R8 | 1800@7.9MHz | 5,10,20 | 15@7.9MHz | 60 | 1.45 | 200 |
| AISC-0805F-2R2 | 2200@7.9MHz | 2,5,10,20 | 10@50MHz | 200 | 2.50 | 100 |
| AISC-0805F-3R3 | 3300@7.9MHz | 2,5,10,20 | 15@7.9MHz | 50 | 2.30 | 175 |
| AISC-0805F-3R9 | 3900@7.9MHz | 5,10,20 | 10@7.9MHz | 50 | 2.50 | 80 |
| AISC-0805F-4R7 | 4700@7.9MHz | 2,5,10,20 | 15@7.9MHz | 43 | 2.80 | 140 |
| AISC-0805F-6R8 | 6800@7.9MHz | 2,5,10,20 | 15@7.9MHz | 36 | 3.40 | 115 |
| AISC-0805F-8R2 | 8200@7.9MHz | 5,10,20 | 10@2.5MHz | 35 | 4.50 | 100 |

PARAMETERS

ABRACON P/N:
AISC-0805(F)-xxx

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

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

WIRE WOUND INDUCTOR - CERAMIC or FERRITE



2.29 x 1.73 x 1.55mm

AISC-0805(F)



RoHS/RoHS II compliant

| Part Number | L(nH) @Test Freq. | Tolerance (±%) | Q, Min @Test Freq. | SRF Min (MHz) | R _{DC} Max (Ω) | I _{DC} Max (mA) |
|----------------|----------------------|-------------------|-----------------------|------------------|----------------------------|-----------------------------|
| AISC-0805F-100 | 10000@2.5MHz | 2,5,10,20 | 10@2.5MHz | 30 | 4.70 | 98 |
| AISC-0805F-150 | 15000@2.5MHz | 2,5,10,20 | 10@2.5MHz | 23 | 6.50 | 80 |
| AISC-0805F-220 | 22000@2.5MHz | 2,5,10,20 | 10@2.5MHz | 20 | 8.00 | 68 |
| AISC-0805F-330 | 33000@2.5MHz | 2,5,10,20 | 10@2.5MHz | 17 | 10.7 | 60 |
| AISC-0805F-470 | 47000@2.5MHz | 2,5,10,20 | 10@2.5MHz | 14 | 13.8 | 55 |
| AISC-0805F-680 | 68000@2.5MHz | 2,5,10,20 | 8@2.5MHz | 11 | 17.5 | 40 |

Test Conditions

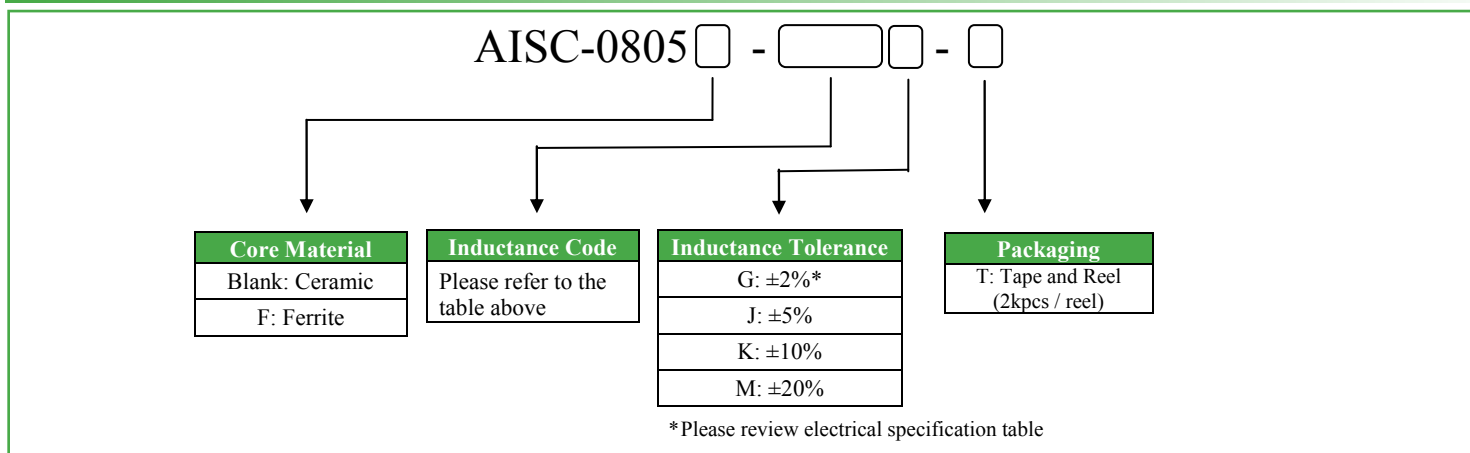
Inductance (L): Agilent4287A+Agilent16197A or equivalent, 50mV

Direct Current Resistance (DCR): HIOKI 3540 or equivalent

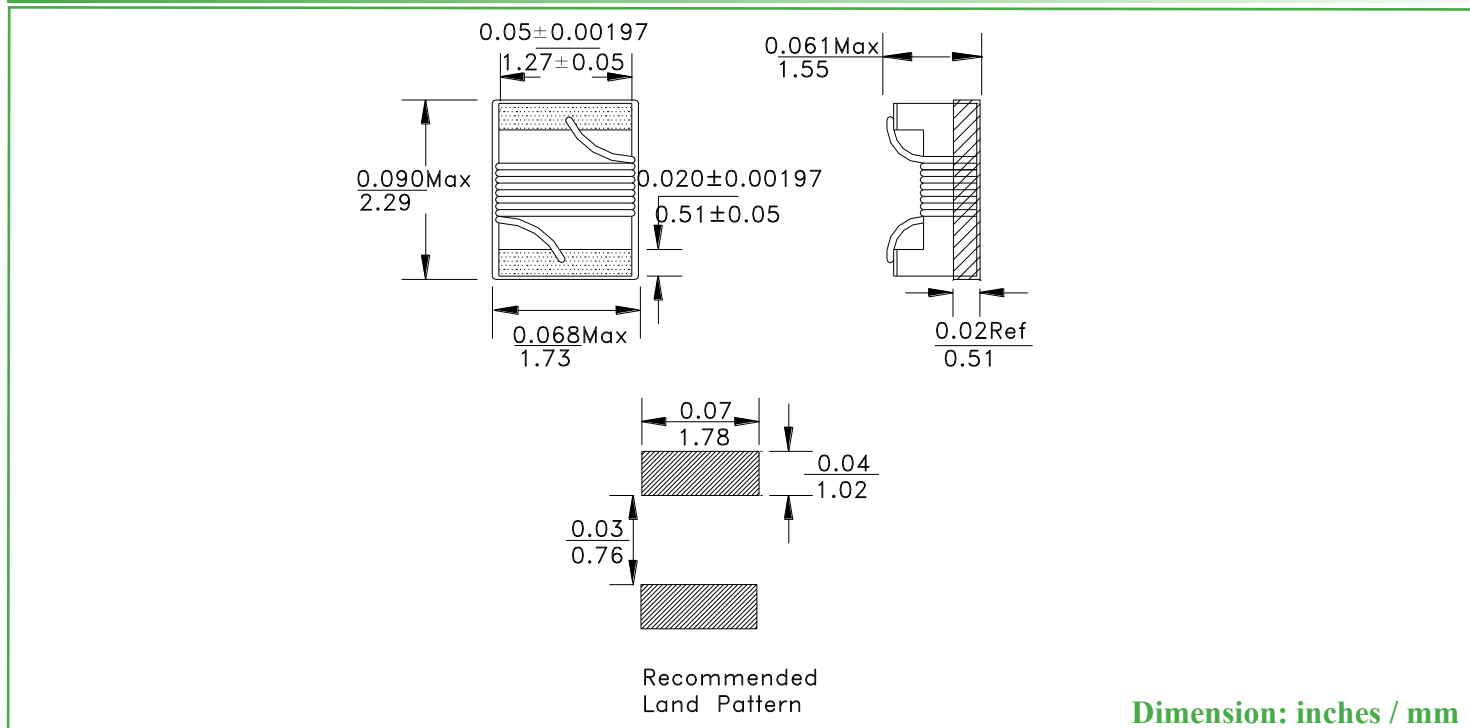
Temperature rise current (I_r): Electric Power, Electric current meter, Thermometer

I_{DC}: Based on temperature rise (ΔT: 20°C)

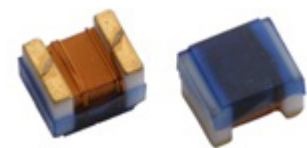
PART IDENTIFICATION:



OUTLINE DRAWING:



WIRE WOUND INDUCTOR - CERAMIC or FERRITE



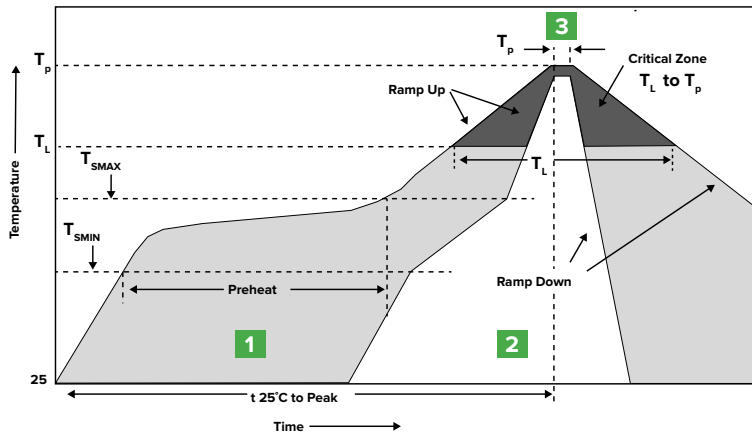
2.29 x 1.73 x 1.55mm

AISC-0805(F)



RoHS/RoHS II compliant

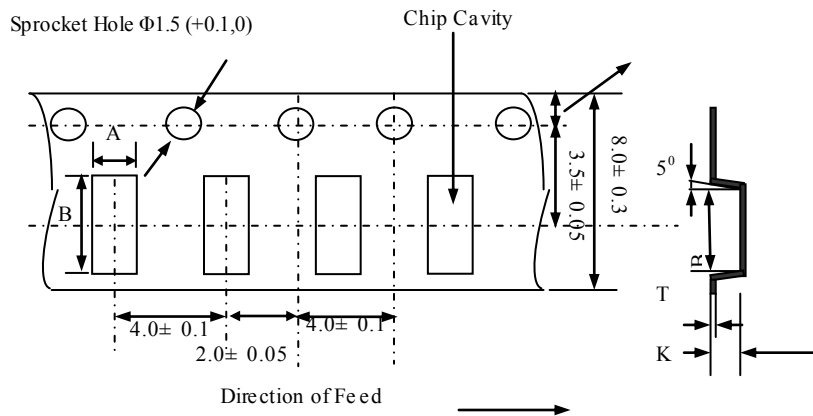
REFLOW PROFILE:



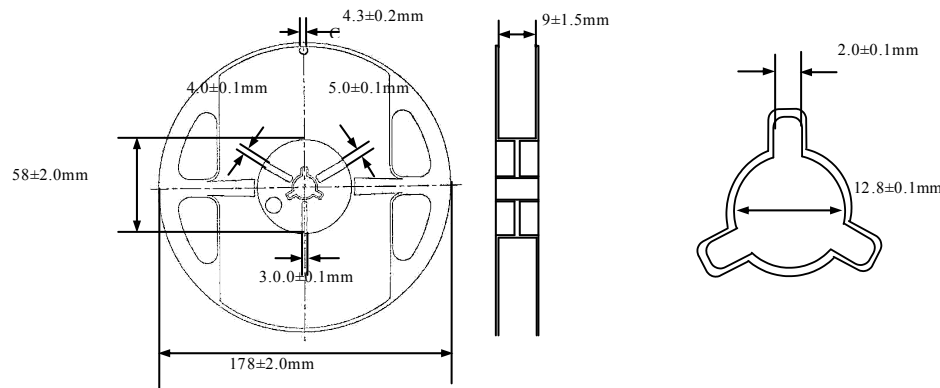
| Zone | Description | Temperature | Times |
|------|-------------|--|----------------|
| 1 | Preheat | T_{SMIN} to T_{SMAX} 150°C to 190°C | 60 to 120 sec. |
| 2 | Reflow | T_L 240°C | 20 to 40 sec. |
| 3 | Peak heat | T_P 255°C | 10 sec. MAX |

TAPE & REEL:

T= tape and reel (2,000pcs/reel)



| Type | A | B | K | T |
|------|----------|---------|----------|----------|
| 2012 | 1.88±0.2 | 2.4±0.2 | 1.35±0.2 | 0.22±0.1 |



Dimension: mm

ATTENTION: Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



1501 Hidden Creek Lane Spicewood TX 78751
 Phone: 949-546-8000 | Fax: 949-546-8001
 For terms and conditions of sales visit:
www.abracon.com

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