AISC-0805-R082J-T Datasheet

https://www.DiGi-Electronics.com

DiGi Electronics Part Number	AISC-0805-R082J-T-DG
Manufacturer	Abracon LLC
Manufacturer Product Number	AISC-0805-R082J-T
Description	FIXED IND 82NH 400MA 420MOHM SMD
Detailed Description	82 nH Unshielded Drum Core, Wirewound Inductor 400 mA 420mOhm Max 0805 (2012 Metric)

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
AISC-0805-R082J-T	Abracon LLC
Series:	Product Status:
AISC-0805	Active
Type:	Material - Core:
Drum Core, Wirewound	Ceramic
Inductance:	Tolerance:
82 nH	±5%
Current Rating (Amps):	Current - Saturation (Isat):
400 mA	-
Shielding:	DC Resistance (DCR):
Unshielded	420mOhm Max
Q @ Freq:	Frequency - Self Resonant:
50 @ 500MHz	1.3GHz
Ratings:	Operating Temperature:
-	-40°C ~ 125°C
Inductance Frequency - Test:	Mounting Type:
150 MHz	Surface Mount
Package / Case:	Supplier Device Package:
0805 (2012 Metric)	0805
Size / Dimension:	Height - Seated (Max):
0.090" L x 0.068" W (2.29mm x 1.73mm)	0.061" (1.55mm)

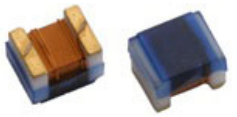
Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8504.50.8000	

WIRE WOUND INDUCTOR - CERAMIC or FERRITE

AISC-0805(F)

RoHS/RoHS II compliant



2.29 x 1.73 x 1.55mm

FEATURES:

- Ceramic or Ferrite Construction assures the utmost in the thermal stablity 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.

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5101 Hidden Creek Ln Spicewood TX 78669
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For terms and conditions of sales, please visit:
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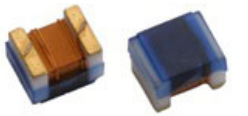
REVISED: 08-31-20

WIRE WOUND INDUCTOR - CERAMIC or FERRITE

AISC-0805(F)

RoHS/RoHS II compliant



2.29 x 1.73 x 1.55mm

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 (Ir): Electric Power, Electric current meter, Thermometer

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

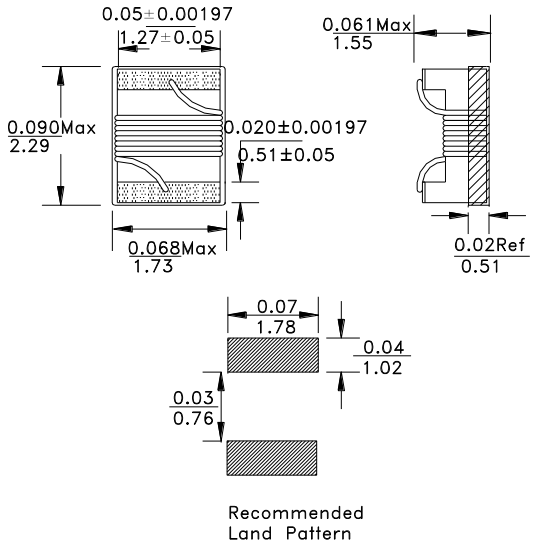
PART IDENTIFICATION:

AISC-0805 □ - □ □ - □

Core Material	Inductance Code	Inductance Tolerance	Packaging
Blank: Ceramic	Please refer to the table above	G: ±2%*	T: Tape and Reel (2kpcs / reel)
F: Ferrite		J: ±5%	
		K: ±10%	
		M: ±20%	

*Please review electrical specification table

OUTLINE DRAWING:



Dimension: inches / mm

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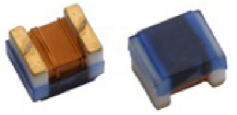

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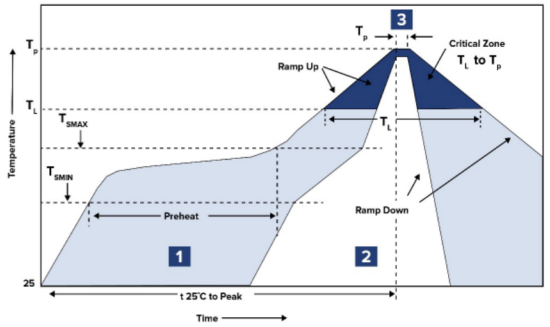
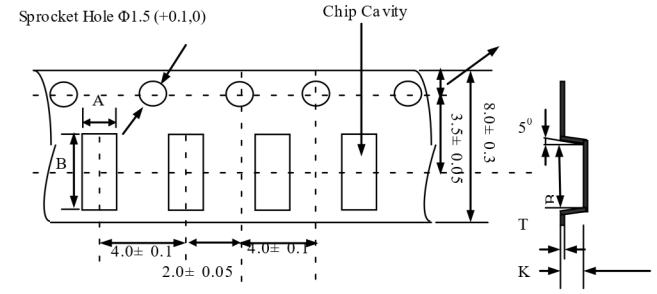
REFLOW PROFILE:



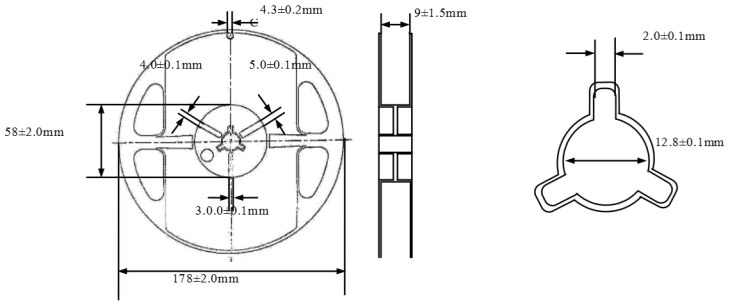
Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} to T_{SMAX} 150°C to 190°C	60 to 120 sec.
2	Reflow	T_L 240°C	20 to 40 sec.
3	Peak heat	T_p 255°C±5°C	10 sec. MAX

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



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AISC-0805-R082J-T Abracon LLC FIXED IND 82NH 400MA 420MOHM SMD

OUR CERTIFICATE

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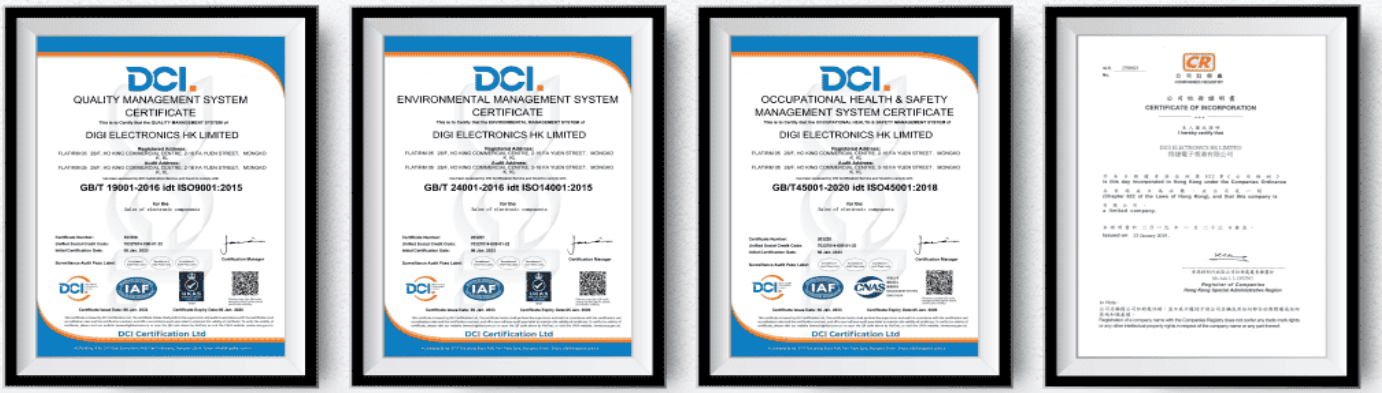

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