

AISC-0402F-70NM-T Datasheet



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DiGi Electronics Part Number	AISC-0402F-70NM-T-DG
Manufacturer	Abracon LLC
Manufacturer Product Number	AISC-0402F-70NM-T
Description	FIXED INDUCTOR
Detailed Description	70 nH Unshielded Drum Core, Wirewound Inductor 820 mA 120mOhm Max 0402 (1005 Metric)



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DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

AISC-0402F-70NM-T

Series:

AISC-0402F

Type:

Drum Core, Wirewound

Inductance:

70 nH

Current Rating (Amps):

820 mA

Shielding:

Unshielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

100 MHz

Mounting Type:

Surface Mount

Supplier Device Package:

0402

Height - Seated (Max):

0.028" (0.70mm)

Manufacturer:

Abracon LLC

Product Status:

Obsolete

Material - Core:

Ferrite

Tolerance:

±20%

Current - Saturation (Isat):

-

DC Resistance (DCR):

120mOhm Max

Frequency - Self Resonant:

1.3GHz

Operating Temperature:

-40°C ~ 85°C

Features:

-

Package / Case:

0402 (1005 Metric)

Size / Dimension:

0.043" L x 0.024" W (1.10mm x 0.60mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.8000

Moisture Sensitivity Level (MSL):

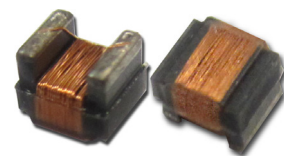
1 (Unlimited)

ECCN:

EAR99

FERRITE WIRE WOUND INDUCTORS

AISC-0402F-70NM-T Abracon LLC FIXED INDUCTOR



1.1 x 0.6 x 0.6mm

AISC-0402F



RoHS/RoHS II Compliant

FEATURES:

- Higher inductance values than other 0402 inductors
- Ferrite construction for high current rating
- Inductance values: 18nH – 200nH; 5% tolerance available

APPLICATIONS:

- Camcorders, LED TVs and other electronic devices

STANDARD SPECIFICATIONS:

Operating Temperature: -40°C to +85°C

Storage Temperature: -10°C to +40°C, 70% RH max. in tape and reel

Part Number AISC-0402F- Inductance Code	Inductance	Tolerance	L Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	MHz	Ω	mA	MHz
Symbol	L	-	Freq.	DCR	I _r	S.R.F
AISC-0402F-20N	20	J, K, M	7.9	0.050	1600	2600
AISC-0402F-33N	33	J, K, M	7.9	0.060	1400	2300
AISC-0402F-56N	56	J, K, M	7.9	0.095	1000	1900
AISC-0402F-72N	72	J, K, M	7.9	0.100	1000	1650
AISC-0402F-85N	85	J, K, M	7.9	0.130	970	1600
AISC-0402F-96N	96	J	100	0.160	730	1100
AISC-0402F-R10	100	J, K, M	7.9	0.160	900	1400
AISC-0402F-R14	140	J, K, M	7.9	0.260	630	1220
AISC-0402F-R18	180	J, K, M	7.9	0.280	560	1150
AISC-0402F-R20	200	J, K, M	7.9	0.440	400	1000
AISC-0402F-R22	220	J, K, M	7.9	0.530	380	1150
AISC-0402F-R27	270	J, K, M	7.9	0.550	360	860
AISC-0402F-R33	330	J, K, M	7.9	0.560	350	820
AISC-0402F-R39	390	J, K, M	7.9	0.750	300	760
AISC-0402F-R47	470	J, K, M	7.9	0.730	310	650
AISC-0402F-R56	560	J, K, M	7.9	0.920	200	600
AISC-0402F-2R2	2200	K, M	1.0	1.800	170	100

Test Equipment

Inductance (L): Agilent 4287A+Agilent 16197A or equivalent, -13dBm or 10mA

DC Resistance (DCR): HIOKI 3540 or equivalent

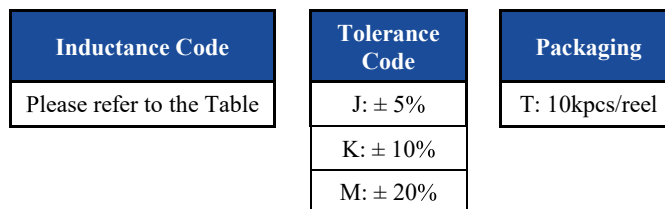
Q Factor (Q): Agilent4287A+Agilent16197A or equivalent, -13dBm or 10mA

Self-Resonant Frequency (SRF): Agilent4991B+Agilent16197A and HP 8753E or equivalent, -20dBm or 50mV

Rated Current (I_r): I_r is direct electric current as chip surface temperature rose just 40°C against chip initial surface temperature

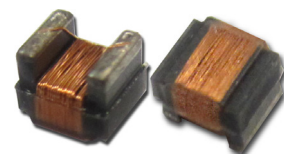
PART NUMBER IDENTIFICATION

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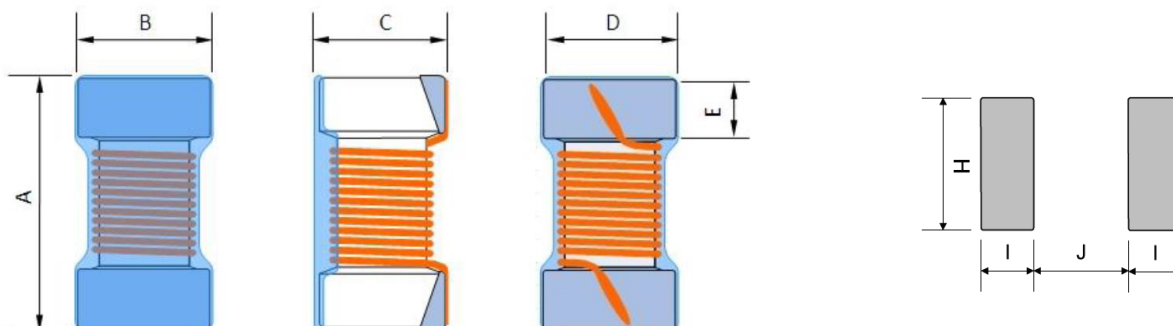
1.1 x 0.6 x 0.6mm

AISC-0402F



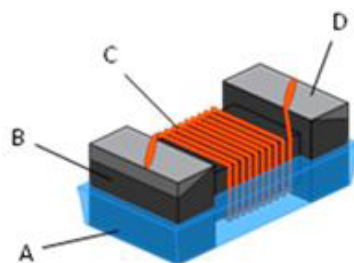
RoHS/RoHS II Compliant

OUTLINE DIMENSIONS:



A	B	C	D	E	H REF.	I REF.	J REF.
1.1±0.1	0.6±0.1	0.55±0.1	0.50±0.1	0.20±0.1	0.65	0.35	0.50

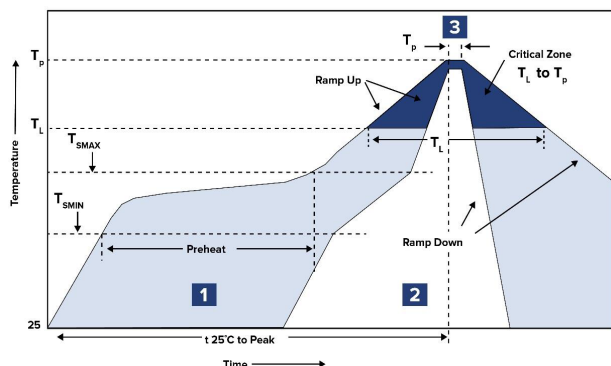
Materials



Dimension: mm

No.	Components	Material
A	Coating	Ultraviolet epoxy resin
B	Core	Ferrite
C	Wire	Polyurethane system enameled copper wire
D	Electrodes	Ag-Pd with Ni and Sn plating

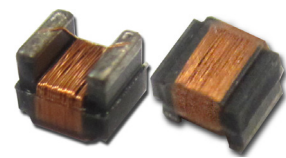
REFLOW PROFILE:



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 200°C	60 ~ 120 sec.
2	Reflow	T_L 217°C	60 ~ 90 sec.
3	Peak heat	T_P 260°C±5°C	10 sec. MAX

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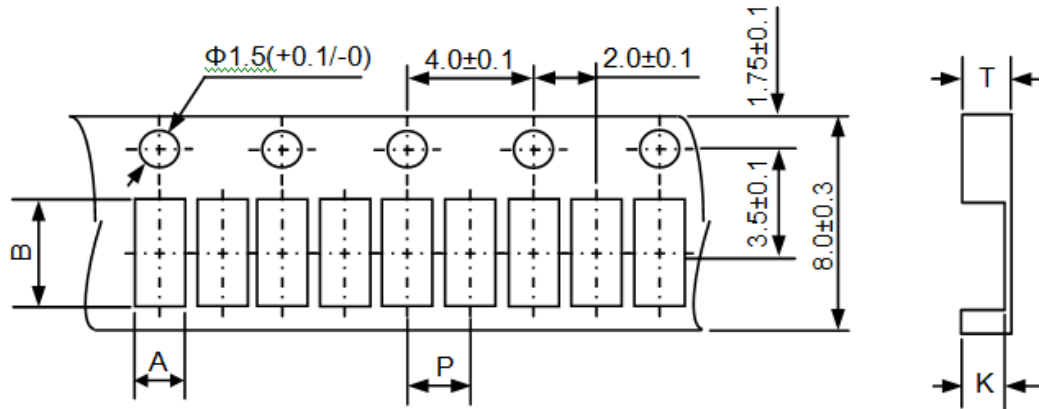
AISC-0402F



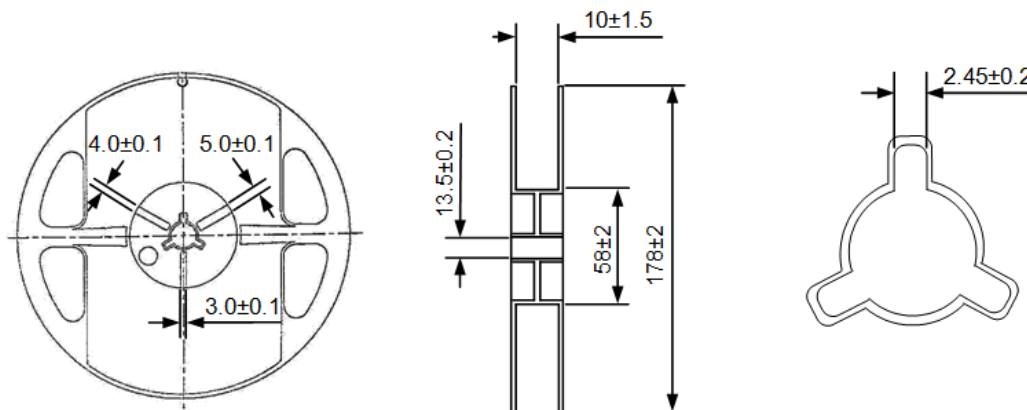
RoHS/RoHS II Compliant

TAPE & REEL:

T= tape and reel (10,000pcs/reel)



A	B	P	K	T
0.65±0.01	1.20±0.1	2.0±0.1	0.65±0.1	0.71±0.1



Dimension: mm

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