SPC TECHNOLOGY

SPC-F005.DWG

REVISIONS

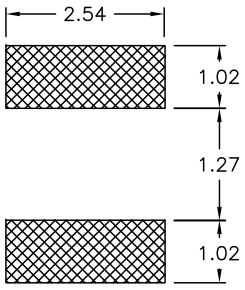
DOC. NO. SPC-F005 * Effective: 7/8/02 * DCP No: 1398

DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
2048	A	RELEASED	JN	05/21/09	JWM	05/21/09	JWM	05/21/09

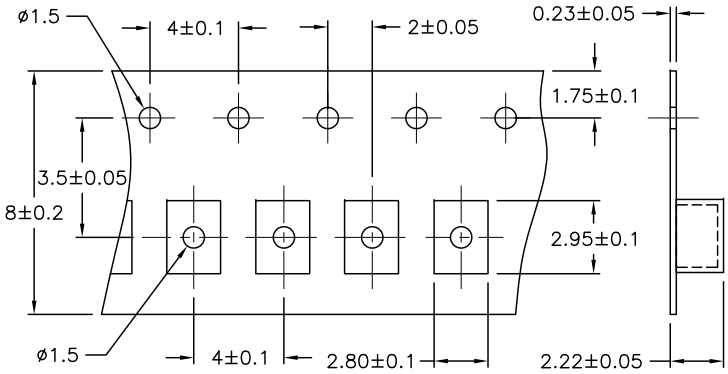
RoHS Compliant

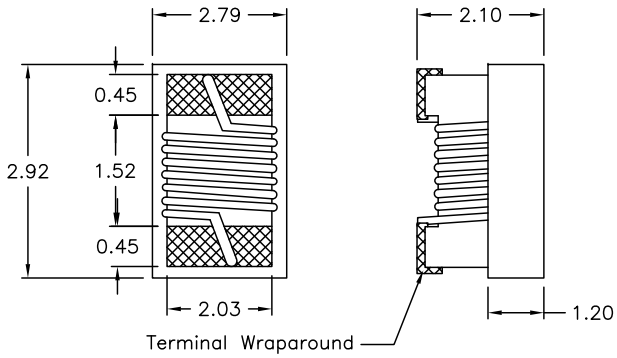
Features:
-Very strong solderability by flow soldering, soldering iron or wave soldering.
-Highly accurate dimensions, can be mounted automatically.
-Terminals are highly resistant to pull forces.
-Highly resistant to mechanical shocks and pressure.
-Highly reliable in environments of sudden temperature change and humidity.

Recommended Pad Layout



Tape Dimension





TOLERANCES:
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
Jason Nash	05/21/09
CHECKED BY:	DATE:
JWM	05/21/09
APPROVED BY:	DATE:
JWM	05/21/09

DRAWING TITLE: Wound Chip Inductor – Case size 1008

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	Ta-1121	Ta-1121.DWG	A

SCALE: NTS | U.O.M.: Millimeters | SHEET: 1 OF 2

Mfr PN	Inductance	Inductance Tolerance	DC Resistance Max	DC Current Rating	Self Resonant Frequency	Package	Q Factor
MCNL08JT100	10000nH	± 5%	2.3ohm	250mA	33MHz	1008	Q Factor:20
MCNL08JT101	100000nH	± 5%	11ohm	120mA	8MHz	1008	Q Factor:12
MCNL08JT150	15000nH	± 5%	2.7ohm	200mA	24MHz	1008	Q Factor:20
MCNL08JT1R0	1000nH	± 5%	0.5ohm	600mA	245MHz	1008	Q Factor:25
MCNL08JT1R5	1500nH	± 5%	0.65ohm	550mA	182MHz	1008	Q Factor:25
MCNL08JT220	22000nH	± 5%	3.3ohm	180mA	18MHz	1008	Q Factor:20
MCNL08JT2R2	2200nH	± 5%	0.95ohm	500mA	105MHz	1008	Q Factor:25
MCNL08JT330	33000nH	± 5%	4ohm	120mA	16MHz	1008	Q Factor:20
MCNL08JT3R3	3300nH	± 5%	1.15ohm	350mA	55MHz	1008	Q Factor:25
MCNL08JT470	47000nH	± 5%	5.9ohm	110mA	14MHz	1008	Q Factor:18
MCNL08JT4R7	4700nH	± 5%	1.28ohm	300mA	43MHz	1008	Q Factor:25
MCNL08JT680	68000nH	± 5%	9.5ohm	90mA	12MHz	1008	Q Factor:18
MCNL08JT6R8	6800nH	± 5%	1.6ohm	300mA	39MHz	1008	Q Factor:25
MCNL08JTR15	150nH	± 5%	0.15ohm	1200mA	800MHz	1008	Q Factor:30
MCNL08JTR22	220nH	± 5%	0.25ohm	1200mA	600MHz	1008	Q Factor:30
MCNL08JTR33	330nH	± 5%	0.2ohm	1100mA	400MHz	1008	Q Factor:30
MCNL08JTR47	470nH	± 5%	0.45ohm	900mA	350MHz	1008	Q Factor:30
MCNL08JTR68	680nH	± 5%	0.4ohm	800mA	300MHz	1008	Q Factor:30

RoHS Compliant

Mechanical Performance

No.	Item	Specification	Test Methods
1	**Vibration Test**	**Appearance: No damage** **L change: within ±10%** **Q change: within ±30%** **RDC: Within specification**	Test device shall be soldered on the substrate Oscillation Frequency: 10 to 55 to 10Hz for 1min Amplitude: 1.5mm Time: 2hrs for each axis (X, Y &Z), total 6hrs
2	**Resistance to Soldering-Heat**	Appearance: No Damage	Solder Temperature: 270±5°C Immersion Time: 10±2sec
3	**Solderability**	The electrodes shall be at least 90% covered with new solder coating	Lead-free Inductor: after fluxing (alpha 100 or equiv), inductor shall be dipped in a melted solder bath at 245±5°C, 5±0.5 second

Climatic Test

No.	Item	Specification	Test Method
1	Temperature Cycle	Appearance: No damage L change: within ±10% Q change: within ±30% RDC: Within specification	One cycle: Step 1: -25±3, 30 Step 2: 25±2, 3 Step 3: 85±3, 30 Step 4: 25±2, 3 Total: 100 cycles Measured after exposure in the room condition for 24hrs
2	Humidity Resistance		Temperature: 40±2°C Relative Humidity: 90~95% Time: 1000hrs Measured after exposure in the room condition for 24hrs
3	High Temperature Storage		Temperature: 85±3°C Relative Humidity: 20% Applied Current: Rated Current Time: 1000hrs Measured after exposure in the room condition for 24hr
4	Low Temperature Storage		Temperature:-25±2°C Relative Humidity:0% Time: 1000hrs Measured after exposure in the room condition for 24hr

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SCALE: NTS | U.O.M.: INCHES [mm] | SHEET: 2 OF 2