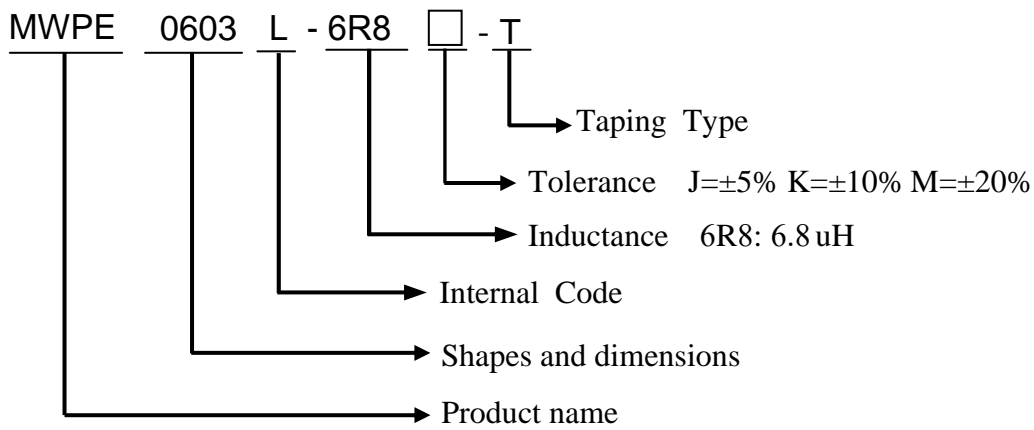


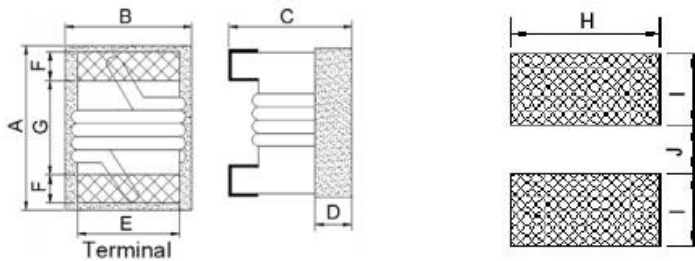
1. Scope

This specification applies wire wound power inductors MWPE0603-Series-T to be delivered to user.

2. Product Identification

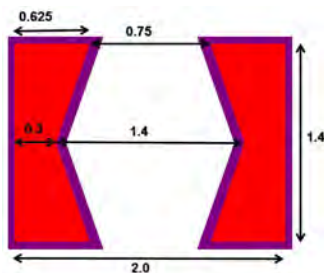


3. Shapes and Dimensions



Series	A	B	C	D	E	F	G	H	I	J
MWPE0603L	1.80 Max.	1.22Max.	1.1 Max.	0.50 typ.	0.76 Ref	0.33 Ref	0.86 Ref	1.02 Ref	0.64 Ref	0.64 Ref

paste mask layer recommendation:



4. Test Instruments

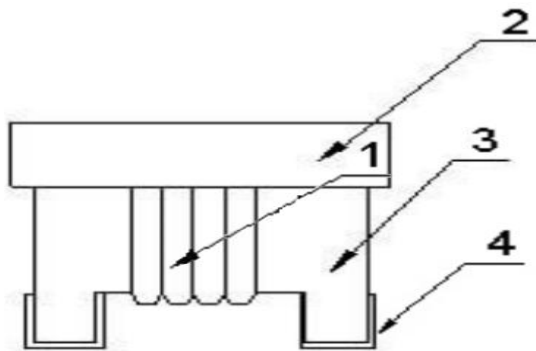
Part No.	L(uH)	Tol. J/K/M	L Test Freq. MHz	Q Typ.	DCR±30% Ω	I rms TYP (mA)	SRF(MHz) Typ.
MWPE0603L-2R2□-T	2.2	J/K/M	7.9	16	0.56	600	82
MWPE0603L-4R7□-T	4.7	J/K/M	7.9	15	0.74	470	55
MWPE0603L-6R8□-T	6.8	J/K/M	7.9	15	1.50	340	43
MWPE0603L-100□-T	10	J/K/M	2.5	15	1.85	280	35
MWPE0603L-150□-T	15	J/K/M	2.5	15	2.80	240	29
MWPE0603L-220□-T	22	J/K/M	2.5	15	3.61	200	24

Note: When ordering, please specify tolerance code. Tolerance : J=±5% , K=±10% , M=±20%

1. Operating temperature range -40°C~125°C (Including self - temperature rise)

2. I_{rms} for a 15°C temperature rise from 25°C ambient with current

5.1 Construction :



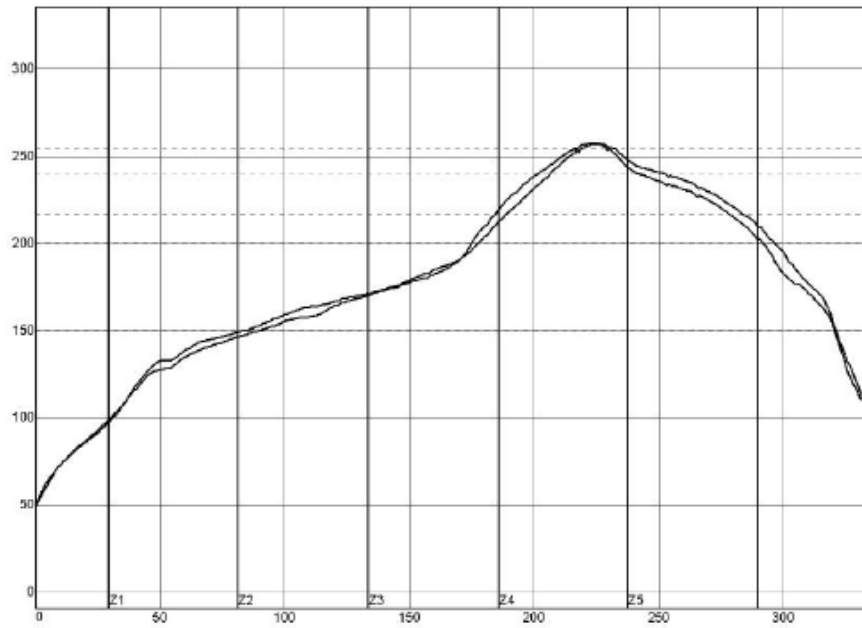
5.2 Material List:

ITEM	PART	DESCRIPTION
1	WIRE	Polysol 180
2	EPOXY	UV GLUE
3	CORE	Ferrite
4	TERMINAL	Ag/Ni/Sn

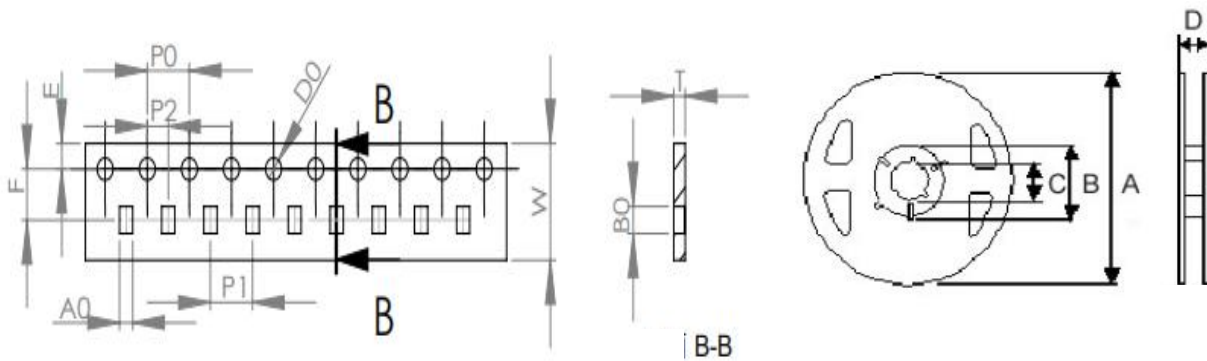
6. Reliability Test

Reliability Of Wire Wound Power Inductors					
1-1.Mechanical Performance					
No	Item	Specification	Test Method		
1-1-1	Vibration	Appearance: No damage Inductance: within $\pm 10\%$ of initial value	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		
1-1-2	Resistance to Soldering Heat	Appearance: No damage	Pre-heating: 150°C, 1min Solder Composition: Sn/Ag3.0/Cu0.5 Solder Temperature: 260 \pm 5°C Immersion Time: 10 \pm 1sec		
1-1-3	Solder ability	The electrodes shall be at least 95% covered with new solder coating	Pre-heating: 150°C, 1min Solder Composition: Sn/Ag3.0/Cu0.5 Solder Temperature: 245 \pm 3°C Immersion Time: \leq 3sec		
1-1-4	Resistance to solvent	There must be no change in appearance or obliteration of marking.	Inductors must withstand 6 minutes of alcohol or water.		
1-2.Environmental Performance					
No	Item	Specification	Test Method		
1-2-1	Temperature Cycle	Appearance: No damage Inductance: within $\pm 10\%$ of initial value	One cycle:		
			Step	Temperature (°C)	Time (min)
			1	-40 \pm 3	30
			2	25 \pm 2	3
			3	125 \pm 3	30
4	25 \pm 2	3			
			Total: 100cycles Measured after exposure in the room condition for 24hrs		
1-2-2	Humidity Resistance		Temperature: 40 \pm 2°C Relative Humidity: 90 ~ 95% Time: 1000hrs Measured after exposure in the room condition for 24hrs		
1-2-3	High Temperature Resistance		Temperature: 125 \pm 3°C Relative Humidity: 0% Time: 1000hrs Measured after exposure in the room condition for 24hrs		
1-2-4	Low Temperature Resistance		Temperature: -40 \pm 3°C Relative Humidity: 0% Time: 1000hrs Measured after exposure in the room condition for 24hrs		

7. Figure . Re-flow Soldering



8. Packaging



Tape Dimensions										Reel Dimensions			
A0	B0	T	W	P0	P1	P2	D0	E	F	A	B	C	D
1.25	1.85	1.1	8	4	4	2	1.55	1.75	3.5	180	60	13	14.4

Packaging Quantity

P/N	Chip/Reel
MWPE0603L-Series-T	4000

※Storage Conditions

1. Temperature and humidity conditions: -10-+40°C and 70% RH.
2. Recommended products should be used within 12 months from the time of delivery.
3. The packaging material should be kept where no chlorine or sulfur exists in the air.