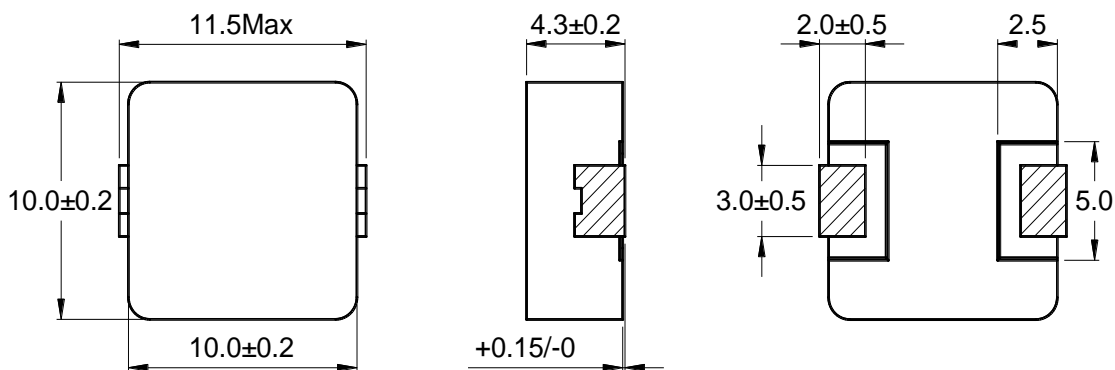


1.Features

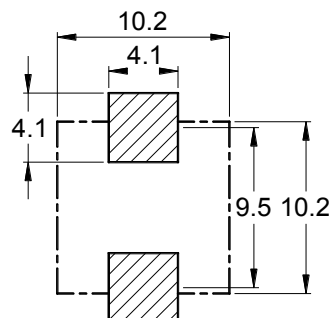
- 1.Die-casting by low loss alloy powder.
- 2.Capable of corresponding high frequency.
- 3.low impedance small parasitic capacitance.
- 4.High performance (Isat) realized by metal dust core.
- 5.Ultra low buzz noise, due to composite construction.
- 6.100% Lead(Pb)-Free and RoHS compliant.
- 7.Operating temperature : $-40^{\circ}\text{C} \sim +150^{\circ}\text{C}$ (Including coils temperature rise)
- 8.Storage Temperature:Store this product under the condition of less 40°C 20% to 70%RH and use within 12 months.

2.Shapes and Dimensions



Unit: mm

3. LAND PATTERNS FOR REFLOW SOLDERING



Unit: mm

4. Electrical Characteristics

ITEM P/N	Test Frequency	Inductance ±20%	D.C.R Max	Isat Max	Irms Max
IMI1050-1R0MA16	1KHZ/1.0V	1.00uH	2.50mΩ	28.0A	16.0A
IMI1050-1R2MA16		1.20uH	2.80mΩ	26.0A	15.0A
IMI1050-1R5MA16		1.50uH	3.10mΩ	21.0A	13.0A
IMI1050-2R2MA16		2.20uH	7.00mΩ	20.0A	11.0A
IMI1050-3R3MA16		3.30uH	7.80mΩ	16.0A	10.0A
IMI1050-4R7MA16		4.70uH	12.0mΩ	15.0A	9.00A
IMI1050-5R6MA16		5.60uH	16.0mΩ	14.0A	8.00A
IMI1050-6R8MA16		6.80uH	16.0mΩ	13.0A	7.50A
IMI1050-8R2MA16		8.20uH	25.0mΩ	12.5A	7.00A
IMI1050-100MA16		10.0uH	28.0mΩ	12.0A	6.00A
IMI1050-220MA16		22.0uH	70.0mΩ	8.00A	4.50A
IMI1050-330MA16		33.0uH	105mΩ	6.00A	4.00A
IMI1050-470MA16		47.0uH	152mΩ	5.50A	3.50A
IMI1050-680MA16		68.0uH	258mΩ	5.00A	3.00A
IMI1050-820MA16		82.0uH	264mΩ	4.50A	2.50A
IMI1050-101MA16		100.0uH	279mΩ	4.00A	2.00A
IMI1050-151MA16	150.0uH	495mΩ	3.00A	1.50A	

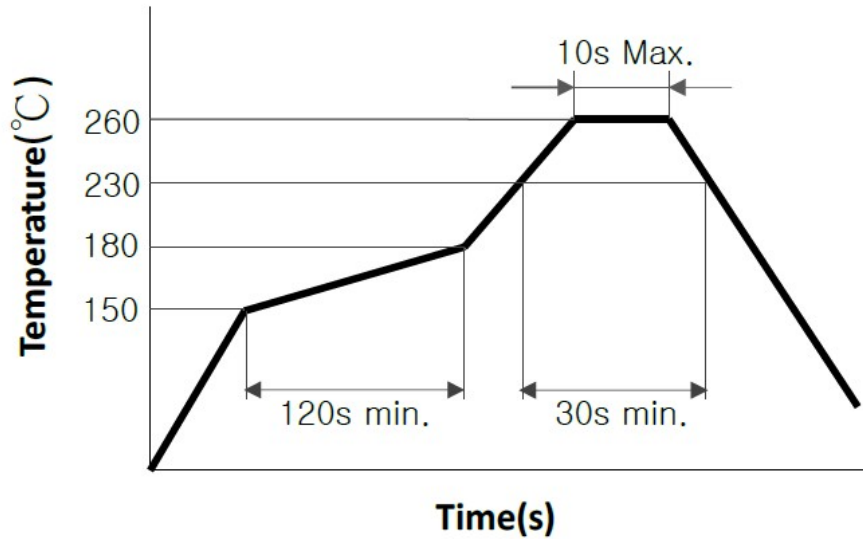
NOTE.

1. Inductance Tolerance Code M – 20%
2. The Isat is DC current value Inductance decrease down to 20%.
(Test by a short period of time to minimize the self-heating effect of the component.)
3. The temperature rise current value is the DC current value having temperature increase up to 40°C.

5. Package Quantity

Standard Quantity for Packaging: 800 pcs/Reel

6. Recommended Soldering Profile



7. Reliability and Test Condition

TEST	Specification & Requirement	Method Used
Solderability	1.No mechanical damage. 2.Inductance change : SPEC. ± 20%	Preheat temperature : 150±10°C Preheat time: 60 sec. Solder temperature : 260±5°C Soldering time : 10±1 sec
Temperature cycle		Step1: -40°C±3°C @ 30±3 min Step2: +25°C±3°C @ 30±3 min Step1: +150°C±3°C @ 30±3 min Total 10 continuous cycles.
High temperature		Temperature : 150°C±2°C Test duration : 96±4 hours
Low temperature		Temperature : -40°C±2°C Test duration : 96±4 hours
Humidity		Humidity : 90%~95% RH Temperature : 40±2°C Test duration : 96 hours.
Vibration		Oscillation Frequency : 10Hz-55Hz~10Hz Amplitude : 1.5±10% mm Direction : X, Y , Z Test duration : 2 hours.