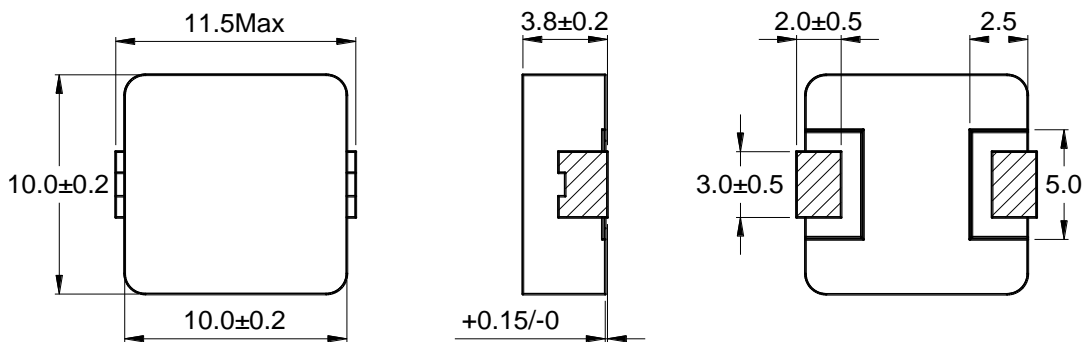


1.Features

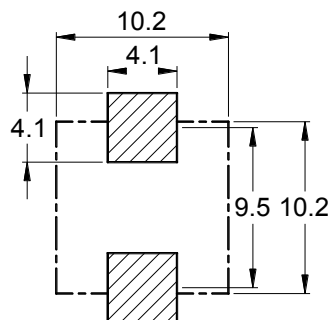
- 1.Die-casting by low loss alloy powder.
- 2.Capable of corresponding high frequency.
- 3.low impedance small parasitic capacitance.
- 4.High performance (Isat) realized by metal dust core.
- 5.Ultra low buzz noise, due to composite construction.
- 6.100% Lead(Pb)-Free and RoHS compliant.
- 7.Operating temperature : -40°C ~ +150°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
IMI1040-1R0M	1KHZ / 1.0V	1.00uH	3.30mΩ	28.0A	21.5A
IMI1040-1R2M		1.20uH	3.90mΩ	28.0A	18.5A
IMI1040-1R5M		1.50uH	4.20mΩ	26.0A	18.0A
IMI1040-2R2M		2.20uH	8.00mΩ	25.0A	13.2A
IMI1040-3R3M		3.30uH	11.8mΩ	16.0A	10.7A
IMI1040-4R7M		4.70uH	20.0mΩ	15.0A	9.90A
IMI1040-5R6M		5.60uH	23.0mΩ	14.0A	8.10A
IMI1040-6R8M		6.80uH	23.5mΩ	12.0A	7.70A
IMI1040-8R2M		8.20uH	27.0mΩ	9.50A	7.30A
IMI1040-100M		10.0uH	30.0mΩ	9.30A	6.90A
IMI1040-150M		15.0uH	45.0mΩ	7.00A	5.80A
IMI1040-220M		22.0uH	66.0mΩ	6.00A	4.70A
IMI1040-330M		33.0uH	92.0mΩ	5.00A	3.70A
IMI1040-470M		47.0uH	145mΩ	4.50A	3.10A

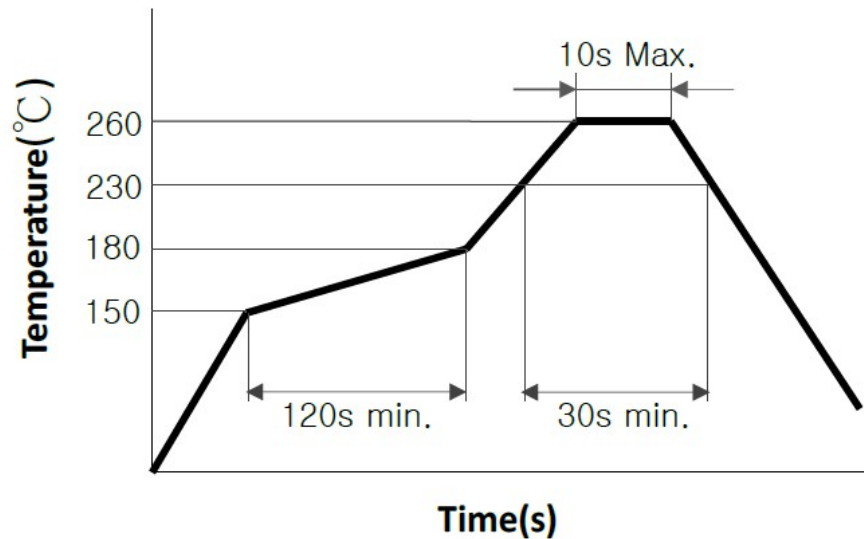
NOTE.

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: 1,000 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.