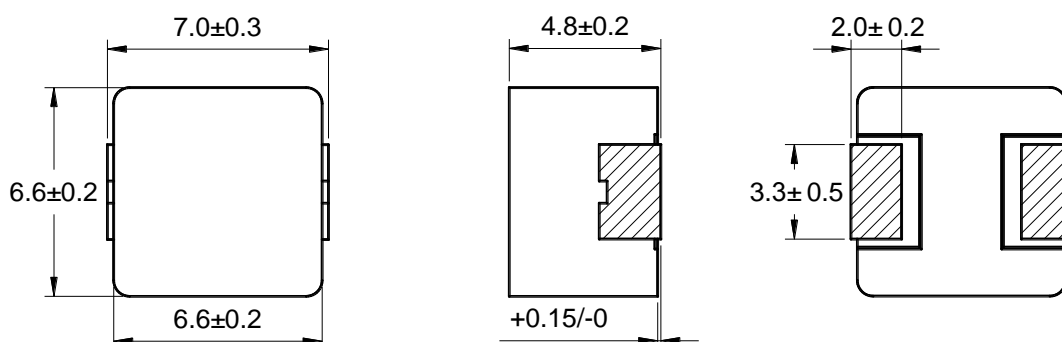


1.Features

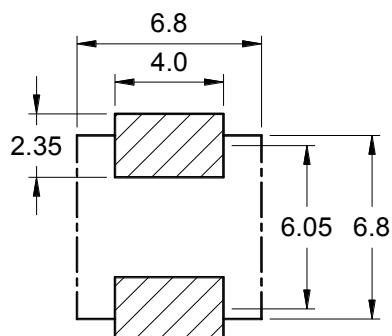
- 1.Die-casting by low loss alloy powder.
- 2.Capable of corresponding high frequency.
- 3.low impedance small parasitic capacitance.
- 4.High performance (Isat) realized by metal dust core.
- 5.Ultra low buzz noise, due to composite construction.
- 6.100% Lead(Pb)-Free and RoHS compliant.
- 7.Operating 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
IMI0650-1R0MA16	1KHZ/1.0V	1.00uH	7.20mΩ	18.0A	9.00A
IMI0650-1R5MA16		1.50uH	8.50mΩ	15.0A	8.50A
IMI0650-2R2MA16		2.20uH	12.5mΩ	14.0A	8.00A
IMI0650-3R3MA16		3.30uH	16.0mΩ	11.0A	7.00A
IMI0650-4R7MA16		4.70uH	20.0mΩ	10.0A	6.00A
IMI0650-6R8MA16		6.80uH	26.4mΩ	9.00A	5.00A
IMI0650-8R2MA16		8.20uH	45.0mΩ	8.50A	4.50A
IMI0650-100MA16		10.0uH	46.0mΩ	8.00A	4.00A
IMI0650-220MA16		22.0uH	105mΩ	5.00A	3.00A
IMI0650-330MA16		33.0uH	144mΩ	4.50A	2.50A
IMI0650-470MA16		47.0uH	200mΩ	2.50A	1.50A
IMI0650-560MA16		56.0uH	242mΩ	2.40A	1.40A
IMI0650-101MA16		100.0uH	320mΩ	2.00A	1.00A

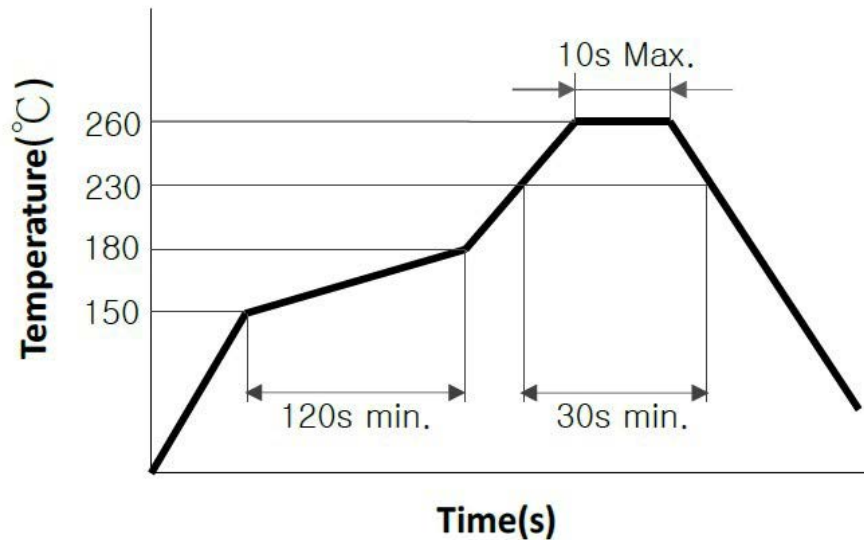
NOTE.

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. \pm 20%	Preheat temperature : $150\pm 10^{\circ}\text{C}$ Preheat time: 60 sec. Solder temperature : $260\pm 5^{\circ}\text{C}$ Soldering time : 10 ± 1 sec
Temperature cycle		Step1: $-40^{\circ}\text{C}\pm 3^{\circ}\text{C}$ @ 30 ± 3 min Step2: $+25^{\circ}\text{C}\pm 3^{\circ}\text{C}$ @ 30 ± 3 min Step1: $+150^{\circ}\text{C}\pm 3^{\circ}\text{C}$ @ 30 ± 3 min Total 10 continuous cycles.
High temperature		Temperature : $150^{\circ}\text{C}\pm 2^{\circ}\text{C}$ Test duration : 96 ± 4 hours
Low temperature		Temperature : $-40^{\circ}\text{C}\pm 2^{\circ}\text{C}$ Test duration : 96 ± 4 hours
Humidity		Humidity : 90%~95% RH Temperature : $40\pm 2^{\circ}\text{C}$ Test duration : 96 hours.
Vibration		Oscillation Frequency : 10Hz-55Hz~10Hz Amplitude : $1.5\pm 10\%$ mm Direction : X, Y, Z Test duration : 2 hours.