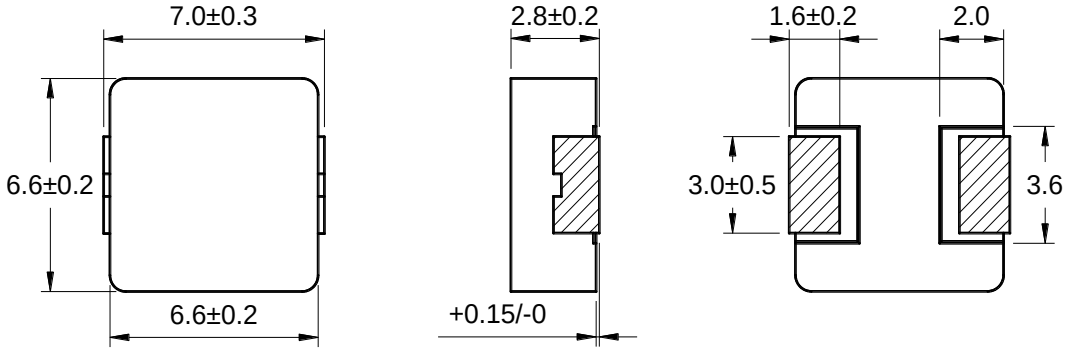
1.Features

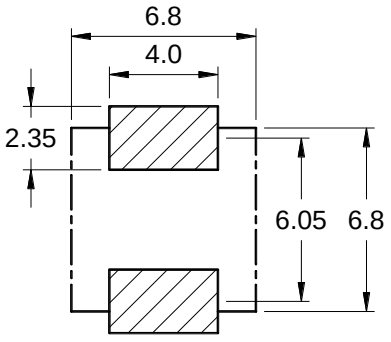
1. Die-casting by low loss alloy powder.
2. Capable of corresponding high frequency.
3. low impedance small parasitic capacitance.
4. High performance (Isat) realized by metal dust core.
5. Ultra low buzz noise, due to composite construction.
6. 100% Lead(Pb)-Free and RoHS compliant.
7. Operating temperature : -40°C ~ +150°C (Incluing 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
IMI0630-1R0MA16	1KHZ/1.0V	1.00uH	7.40mΩ	15.5A	12.7A
IMI0630-1R5MA16		1.50uH	12.1mΩ	14.0A	10.9A
IMI0630-2R2MA16		2.20uH	15.0mΩ	11.5A	9.10A
IMI0630-2R7MA16		2.70uH	18.0mΩ	9.50A	8.30A
IMI0630-3R3MA16		3.30uH	22.0mΩ	9.50A	7.80A
IMI0630-4R7MA16		4.70uH	40.0mΩ	9.50A	5.50A
IMI0630-5R6MA16		5.60uH	42.0mΩ	6.00A	5.30A
IMI0630-6R8MA16		6.80uH	54.0mΩ	7.00A	4.00A
IMI0630-8R2MA16		8.20uH	72.0mΩ	6.00A	3.50A
IMI0630-100MA16		10.0uH	76.0mΩ	5.00A	3.00A
IMI0630-220MA16		22.0uH	152mΩ	3.50A	2.00A
IMI0630-330MA16		33.0uH	222mΩ	3.00A	1.50A
IMI0630-470MA16		47.0uH	290mΩ	2.50A	1.20A
IMI0630-101MA16		100.0uH	858mΩ	1.70A	1.00A

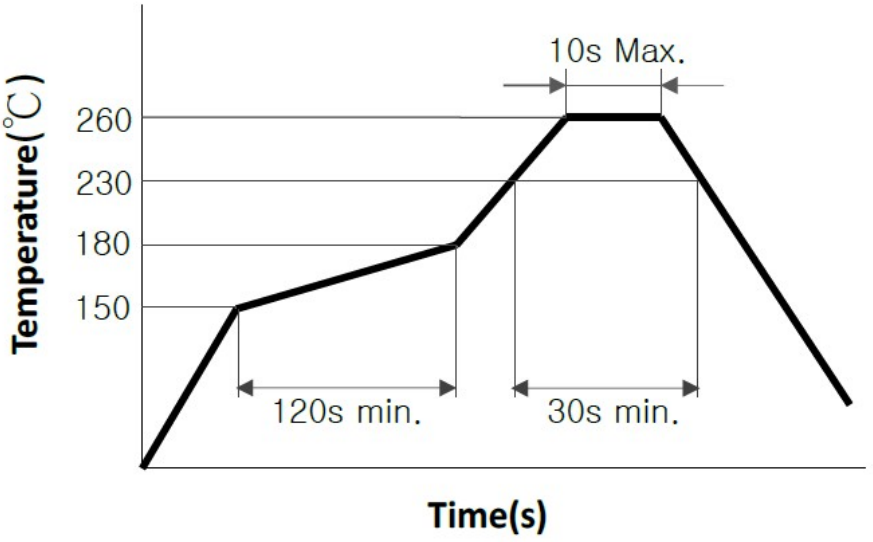
NOTE.

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℃.

5. Package Quantity

Standard Quantity for Packaging: 1,500 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.