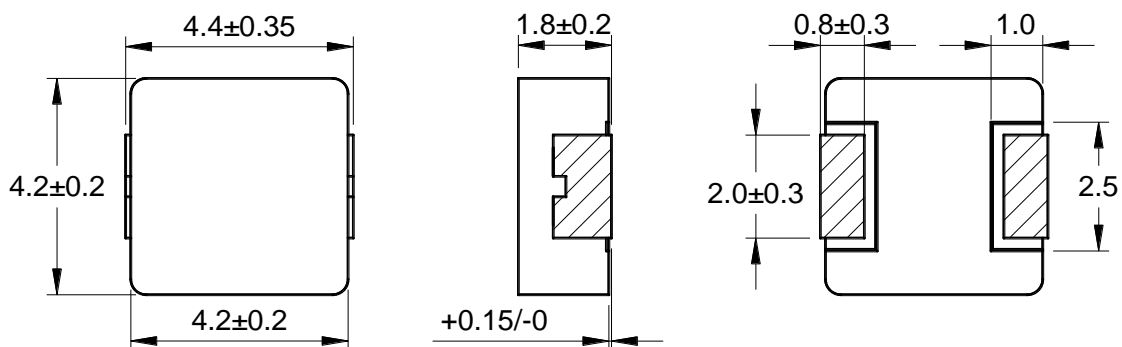


1.Features

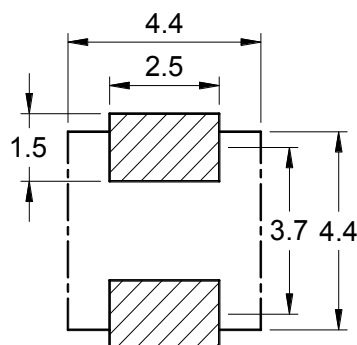
1. Die-casting by low loss alloy powder.
2. Capable of corresponding high frequency .
3. low impedance small parasitic capacitance.
4. High performance (Isat) realized by metal dust core.
5. Ultra low buzz noise, due to composite construction.
6. 100% Lead(Pb)-Free and RoHS compliant.
7. Operating temperature : -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
IMI0420-R10MA16	1KHZ / 1.0V	0.10uH	4.00mΩ	28.0A	15.6A
IMI0420-R22MA16		0.22uH	6.60mΩ	18.0A	11.7A
IMI0420-R33MA16		0.33uH	10.5mΩ	12.0A	9.90A
IMI0420-R47MA16		0.47uH	15.5mΩ	11.0A	8.00A
IMI0420-R56MA16		0.56uH	16.0mΩ	10.0A	7.90A
IMI0420-R68MA16		0.68uH	18.0mΩ	9.00A	7.60A
IMI0420-1R0MA16		1.00uH	27.0mΩ	9.00A	6.20A
IMI0420-1R2MA16		1.20uH	27.0mΩ	7.00A	4.50A
IMI0420-1R5MA16		1.50uH	46.0mΩ	6.00A	4.50A
IMI0420-1R8MA16		1.80uH	47.0mΩ	6.00A	4.50A
IMI0420-2R2MA16		2.20uH	65.0mΩ	5.00A	4.00A
IMI0420-2R9MA16		2.90uH	80.0mΩ	5.00A	3.40A
IMI0420-3R3MA16		3.30uH	87.0mΩ	4.00A	3.30A
IMI0420-4R7MA16		4.70uH	115mΩ	3.30A	2.80A
IMI0420-6R8MA16		6.80uH	228mΩ	3.00A	2.05A
IMI0420-100MA16		10.0uH	282mΩ	2.20A	1.80A

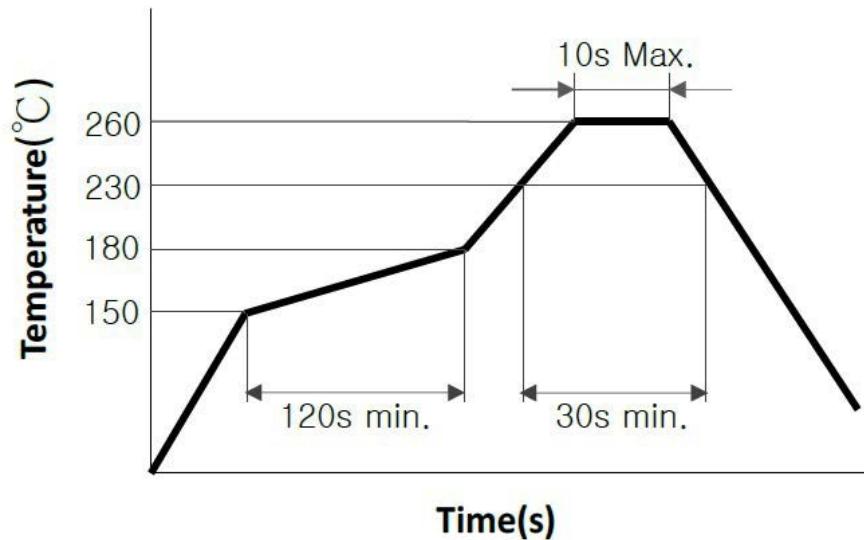
NOTE.

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: 3,000 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.