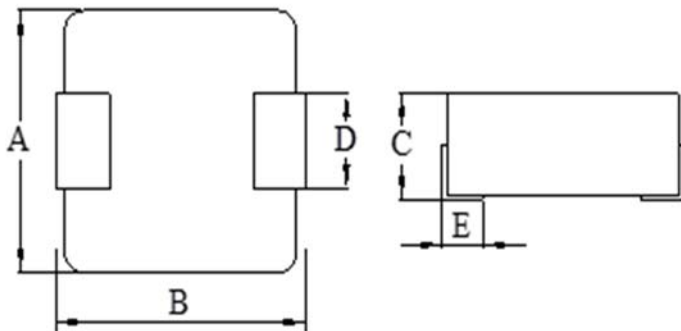


### 1.Features

- 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.

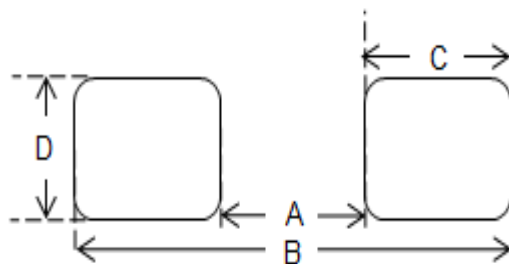
### 2.Shapes and Dimensions



IMI0850	
A	8.1 (Typ.)
B	8.1 (Typ.)
C	4.8 (Typ.)
D	3.3 ± 0.3
E	2.2 ± 0.3

Unit: mm

### 3. LAND PATTERNS FOR REFLOW SOLDERING



A	3.2 Ref
B	9.6 Ref
C	3.2 Ref
D	4.0 Ref

Unit: mm

### 4. Electrical Characteristics

ITEM P/N	Test Frequency	Inductance ±20%	D.C.R Max	Isat Max	Irms Max
IMI0850-1R0MA16	1KHZ/1.0V	1.00uH	5.60mΩ	21.0A	14.0A
IMI0850-2R2MA16		2.20uH	9.00mΩ	18.0A	11.0A
IMI0850-3R3MA16		3.30uH	13.0mΩ	15.0A	10.0A
IMI0850-4R7MA16		4.70uH	20.0mΩ	14.0A	8.00A
IMI0850-6R8MA16		6.80uH	24.0mΩ	11.0A	6.00A
IMI0850-100MA16		10.0uH	36.0mΩ	10.0A	5.00A
IMI0850-220MA16		22.0uH	94.0mΩ	7.00A	3.50A
IMI0850-330MA16		33.0uH	150mΩ	6.00A	3.00A
IMI0850-470MA16		47.0uH	192mΩ	4.00A	2.50A
IMI0850-560MA16		56.0uH	205mΩ	3.50A	2.00A
IMI0850-680MA16		68.0uH	233mΩ	3.00A	1.50A
IMI0850-101MA16		100.0uH	326mΩ	2.00A	1.20A

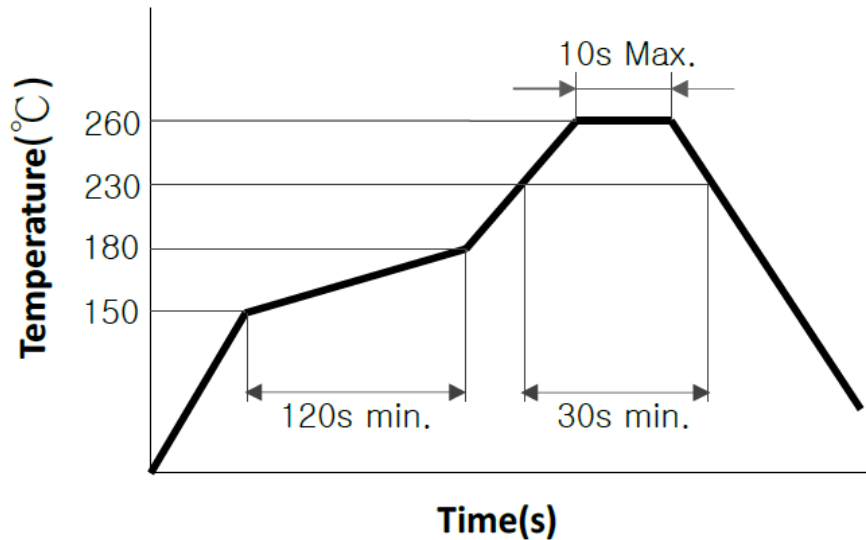
**NOTE.**

1. Inductance Tolerance Code : K – 10% : M – 20%
2. The Isat is DC current value Inductance decrease down to 30%.  
(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		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	1.No mechanical damage. 2.Inductance change : SPEC. ± 20%	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.