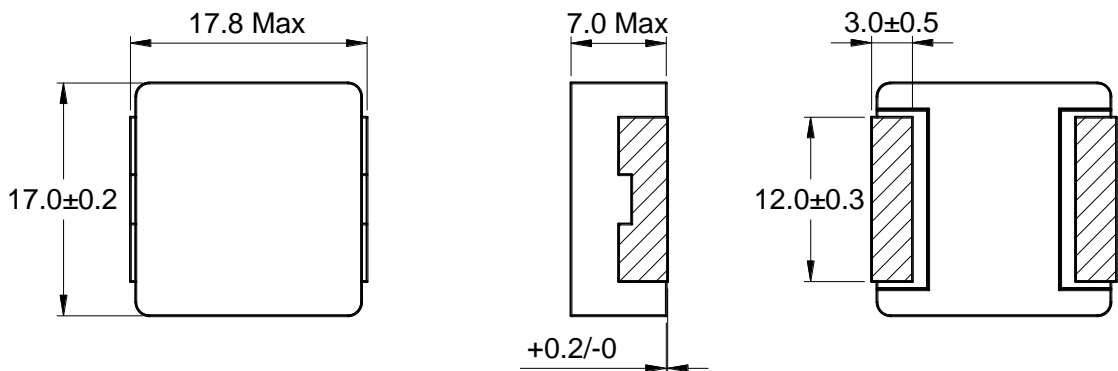


1.Features

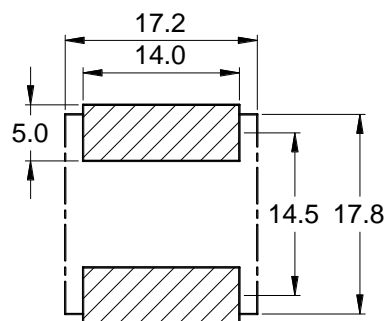
- 1.Die-casting by low loss alloy powder.
- 2.Capable of corresponding high frequency.
- 3.low impedance small parasitic capacitance.
- 4.High performance (Isat) realized by metal dust core.
- 5.Ultra low buzz noise, due to composite construction.
- 6.100% Lead(Pb)-Free and RoHS compliant.
- 7.Operating 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
IMI1770-1R0MA16	1KHZ/1.0V	1.00uH	2.00mΩ	41.0A	35.0A
IMI1770-1R5MA16		1.50uH	2.20mΩ	40.0A	33.0A
IMI1770-2R2MA16		2.20uH	2.70mΩ	40.0A	28.0A
IMI1770-3R3MA16		3.30uH	4.70mΩ	30.0A	22.0A
IMI1770-4R7MA16		4.70uH	4.70mΩ	26.0A	16.0A
IMI1770-6R8MA16		6.80uH	6.90mΩ	23.0A	13.0A
IMI1770-8R2MA16		8.20uH	8.40mΩ	22.0A	12.0A
IMI1770-100MA16		10.0uH	8.50mΩ	18.0A	10.0A
IMI1770-220MA16		22.0uH	25.0mΩ	15.0A	8.00A
IMI1770-330MA16		33.0uH	35.0mΩ	10.0A	6.50A
IMI1770-470MA16		47.0uH	47.0mΩ	9.00A	6.00A
IMI1770-560MA16		56.0uH	58.0mΩ	7.00A	6.50A
IMI1770-680MA16		68.0uH	80.0mΩ	8.50A	5.00A
IMI1770-820MA16		82.0uH	100mΩ	8.00A	4.50A
IMI1770-101MA16		100.0uH	125mΩ	7.00A	4.00A
IMI1770-151MA16		150.0uH	162mΩ	5.00A	3.00A
IMI1770-351MA16	350.0uH	458mΩ	3.50A	2.00A	

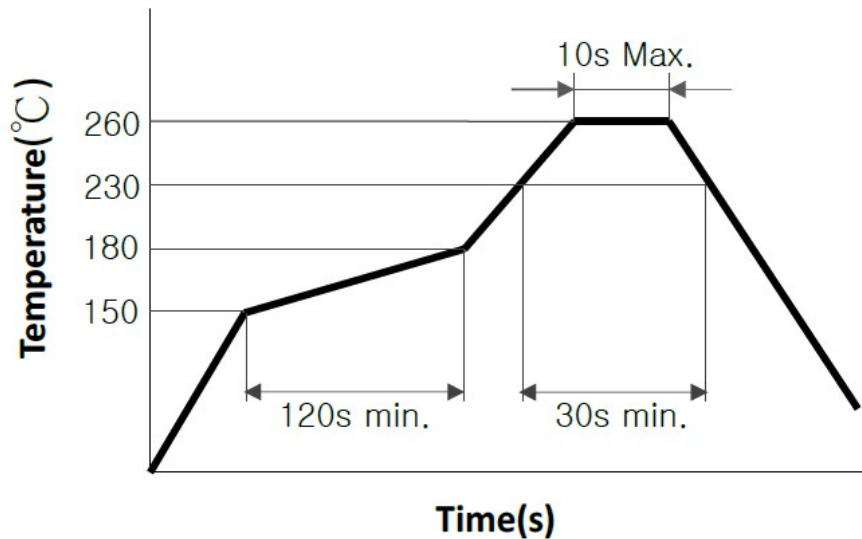
NOTE.

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: 300 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.