

MDE Series

Molding Power Inductors

Size 201610



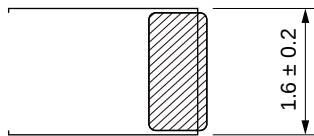
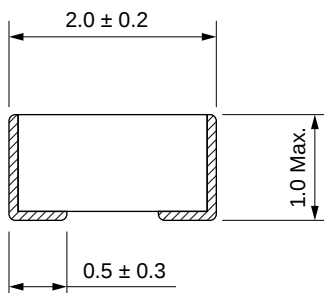
FEATURES

- High saturation current realized by material properties and structure design.
- Low DC resistance to achieve high conversion efficiency and lower temperature rising.
- Low Profile.
- Magnetically shielded structure to accomplish high resolution in EMC protection.
- Halogen free, Lead Free, RoHS Compliance.
- Operating temperature: -40 to +125 °C
- Quantity: 3000PCS

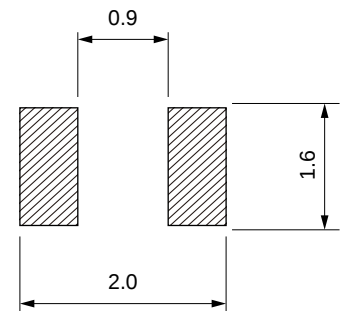
APPLICATION

- Generic in portable DC to DC converter line.
- Smart phone, PAD
- DC/DC converter
- Thin-type power supply module.

Dimensions: [mm]



Land Pattern: [mm]

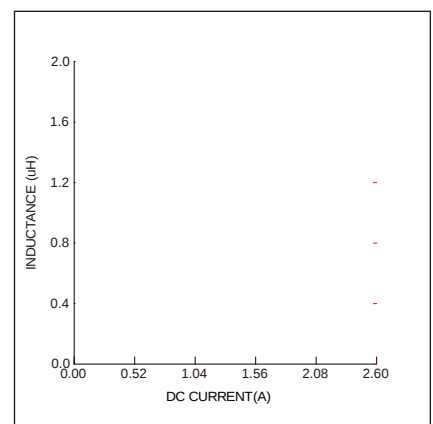
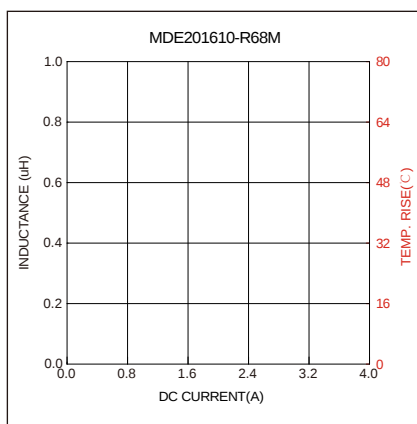
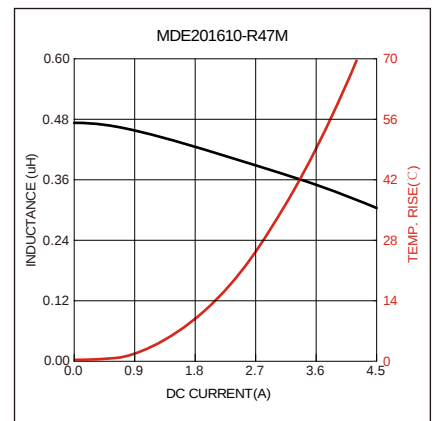
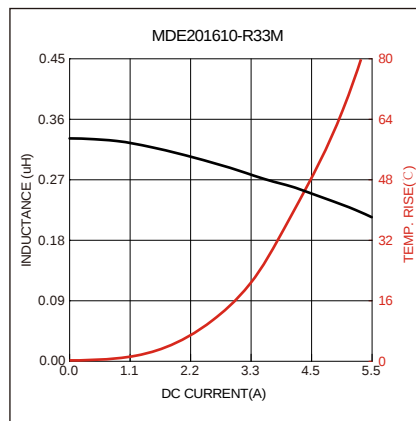
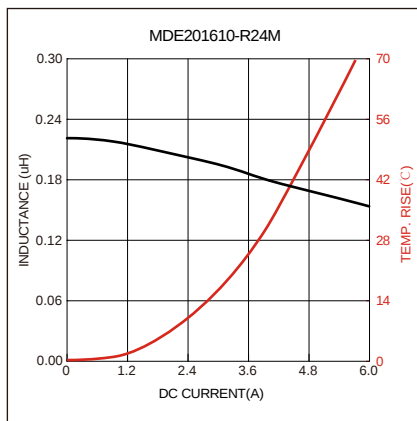


Electrical Properties:

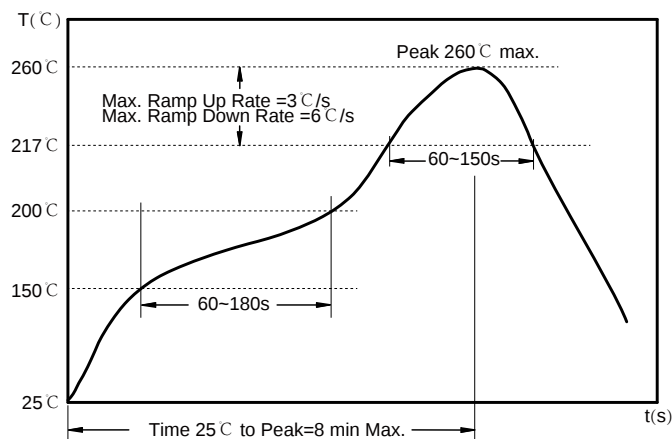
	(μ H)		(m Ω)	(m Ω)	Saturation (A)	Saturation (A)	(A)	(A)
MDE201610-R24M	0.24	±20%	17	21	5.6	5.05	5.0	4.50
MDE201610-R33M	0.33	±20%	24	29	5.0	4.50	4.1	3.69
MDE201610-R47M	0.47	±20%	33	40	4.4	4.00	3.5	3.15
MDE201610-R68M	0.68	±20%	41	49	3.7	3.33	3.4	3.06
MDE201610-1R0M	1.0	±20%	60	69	2.9	2.61	2.6	2.26
MDE201610-1R5M	1.5	±20%	114	129	2.5	2.25	2.0	1.81
MDE201610-2R2M	2.2	±20%	135	150	1.9	1.71	1.7	1.50

Temperature rising current will cause the coil temperature approximate $\Delta T 40^{\circ}\text{C}$
 Saturation current will cause to drop approximately 30 %

Typical Electrical Characteristics:



Soldering Reflow:



Preheat condition: 150 ~200 °C / 60~180 sec.

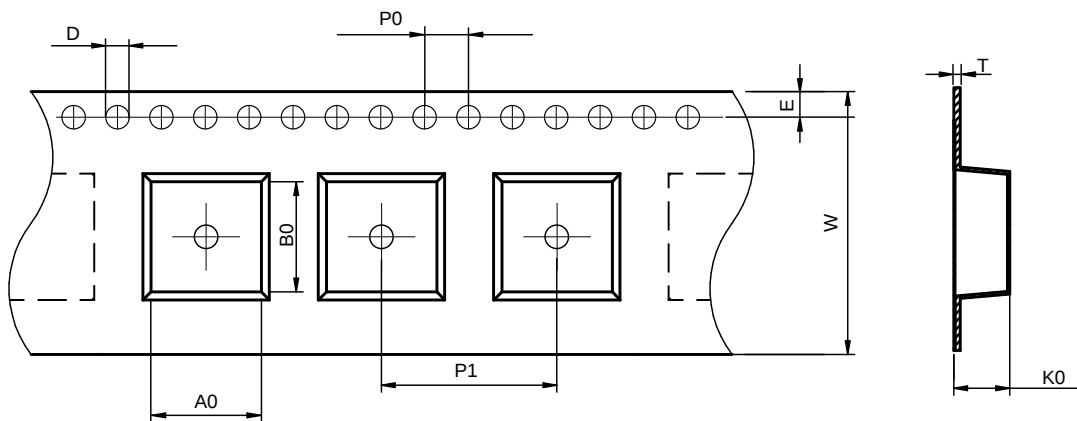
Allowed time above 217 °C: 60~150 sec.

Max temperature: 260 °C.

Time within 5 °C of actual Peak Temperature: 20-40 sec.

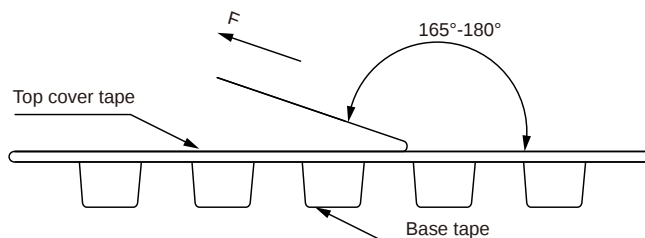
Packaging Information:

Tape Dimension:



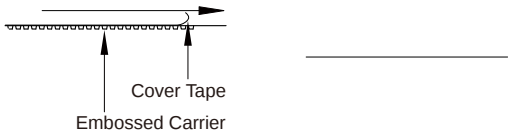
Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDE201610	1.82±0.05	2.23±0.05	1.55±0.05	4.0±0.1	4.0±0.1	8.0±0.3	1.15±0.05	1.75±0.1	0.22±0.05

Peel force of top cover tape:



The peel force of top cover tape shall be between 0.1 to 1.3 N

Reel Dimension: [mm]



Packaging Quantity: