

**MDE Series**  
Molding Power Inductors  
Size 0420



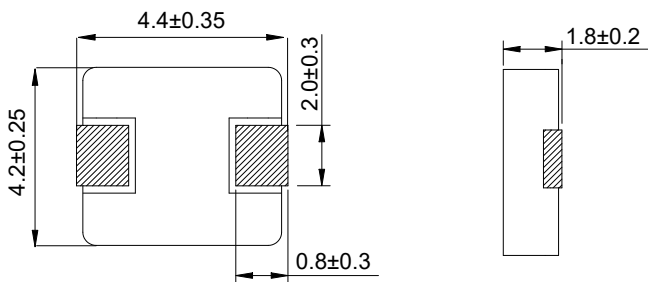
**FEATUERS**

- High rated current
- Frequency up to 3 MHz
- 125 °C maximum total temperature operation
- Low core loss
- Ultra low buzz noise due to molding construction
- Halogen Free & ROHS compliant
- Quantity: 3000pcs

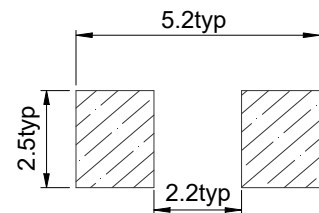
**APPLICATION**

- Laptops and PCs
- Switch and servers
- Base stations
- DC/DC converters
- Battery powered devices
- SSD modules

**Dimensions: [mm]**



**Land Pattern: [mm]**



**Electrical Properties:**

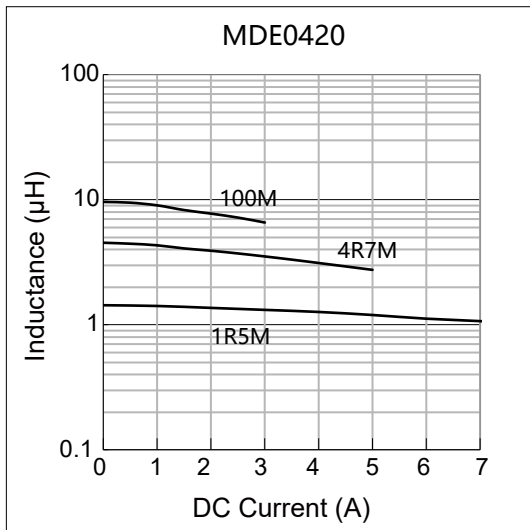
Part No.	L@100KHz /1V (μH)	Tolerance	R <sub>DC</sub> Max. (mΩ)	I <sub>sat</sub> Typ. (A)	I <sub>R</sub> Typ. (A)
MDE0420-R10M	0.1	±20%	4	22	13
MDE0420-R22M	0.22	±20%	6.6	12.5	9.5
MDE0420-R33M	0.33	±20%	11	12	10
MDE0420-R47M	0.47	±20%	14	9.5	7.5
MDE0420-R56M	0.56	±20%	16	9	7
MDE0420-R68M	0.68	±20%	18	8	7
MDE0420-1R0M	1.0	±20%	27	7	6
MDE0420-1R2M	1.2	±20%	27	6.5	6
MDE0420-1R5M	1.5	±20%	46	5.5	5

Part No.	L@100KHz /1V (μH)	Tolerance	R <sub>DC</sub> Max. (mΩ)	I <sub>last</sub> Typ. (A)	I <sub>R</sub> Typ. (A)
MDE0420-2R2M	2.2	±20%	58	5	4.5
MDE0420-3R3M	3.3	±20%	87	3.5	3.3
MDE0420-4R7M	4.7	±20%	105	3	2.8
MDE0420-6R8M	6.8	±20%	175	2.5	2.4
MDE0420-100M	10	±20%	282	2	1.6
MDE0420-220M	22	±20%	363	1.4	1.2

Operating temperature range - 55 °C to + 125 °C  
 I<sub>R</sub> will cause the coil temperature approximate ΔT40 °C  
 I<sub>sat</sub> will cause to drop approximately 30 %

### Typical Electrical Characteristics:

Inductance vs DC Current Characteristics:



Temperature Rise vs DC Current Characteristics:

