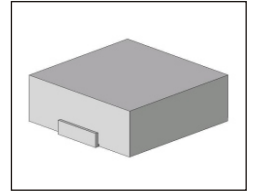


# SMT Power Inductor (MOLDING TYPE)

## MPT420M1 Type

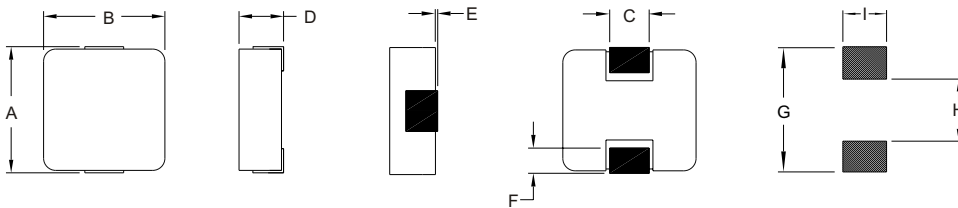
### Features

- RoHS compliant.
- Low profile , high current SMD type.
- Magnetically shielded, suitable for high density mounting.
- High energy storage and low DCR.
- Ideal for power source circuits, DC-DC converter, DC-AC inverters inductor applications.



### Mechanical Dimension:

#### RECOMMENDED PAD PATTERNS



UNIT : mm/inch  
 A = 4.50 / 0.177 Max.  
 B = 4.30 / 0.169 Max.  
 C = 1.50±0.30 / 0.059±0.012  
 D = 2.00 / 0.079 Max.  
 E = 0~0.15 / 0~0.006  
 F = 0.80±0.30 / 0.031±0.012  
 G = 5.20 / 0.205  
 H = 2.20 / 0.087  
 I = 2.50 / 0.098

### Electrical Characteristics: 25°C: 100KHz, 0.25V

PART NO.	L0 ( $\mu$ H)	DCR ( $m\Omega$ ) TYP.	DCR ( $m\Omega$ ) MAX.	Isat <sup>2</sup> (Adc)	I <sub>r</sub> <sup>3</sup> (Adc)
MPT420 - R10M1	0.10	4.5	5.0	30.0	11.0
MPT420 - R22M1	0.22	7.3	8.0	17.0	9.0
MPT420 - R47M1	0.47	14.0	15.5	11.5	6.0
MPT420 - 1R0M1	1.00	32.0	36.0	8.5	3.8

1. All test data is referenced to 25°C ambient.
2. Isat is the DC current which cause the inductance drop 30% typical of its nominal inductance without current.
3. Ir is the DC current which cause the surface temperature of the part increase less than 40°C.
4. Operating temperature range : -55°C to 125°C.



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