

**SURFACE MOUNT MOLDED TYPE
POWER INDUCTOR SERIES MTPI0618**

FEATURES

- Low profile
- High current handling capacity
- Low noise and low DCR
- High reliability and efficiency
- RoHS compliant plus Lead and Halogen free
- Magnetically shielded

ELECTRICAL SPECIFICATIONS

- Inductance range 0.47uH to 6.8uH
- Test frequency 100 KHz with test level 1.0 V
- Test equipment Quadtech 1910 L analyzer
- Rated current range 5.5 to 18.0 Amps
- Tolerance ± 20%
- Rated current Refer to notes below

SPECIFICATIONS

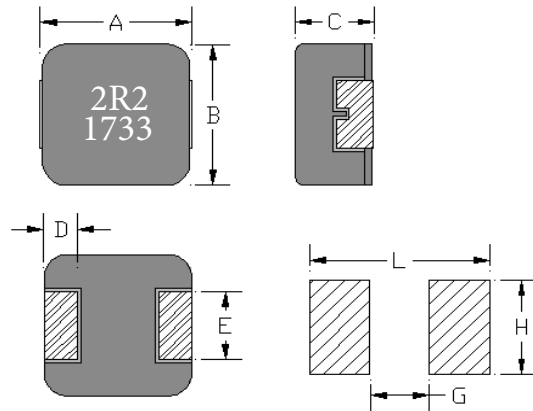
Part Number	L (μH)	Tol % ±	DCR max (mΩ)	Rated Current (A)	
				I _{rms} ⁽¹⁾	I _{sat} ⁽²⁾
MTPI0618-R47M	0.47	20	7.4	12.0	18.0
MTPI0618-R68M	0.68	20	11.0	10.0	17.0
MTPI0618-1R0M	1.00	20	17.0	7.0	14.0
MTPI0618-2R2M	2.20	20	35.0	6.0	11.0
MTPI0618-3R3M	3.30	20	46.0	5.0	9.0
MTPI0618-4R7M	4.70	20	76.0	4.0	7.0
MTPI0618-5R6M	5.60	20	86.0	3.5	6.0
MTPI0618-6R8M	6.80	20	104.0	3.0	5.5

PHYSICAL SPECIFICATIONS

- Operating temp. -40°C to +125°C
- Core Mixed material
- Terminal construction Solder plating
- Packaging Box 4000 pieces per inner box
 T & R 2000 pieces per reel
- Tape & reel spec. Tape 16 mm embossed carrier
 Reel 330 mm reel

DIMENSIONS IN MILLIMETERS

- Length A 7.0 ± 0.3
- Width B 6.6 ± 0.3
- Height C 1.6 ± 0.2
- Terminal width D 1.8 ± 0.3
- Terminal length E 3.0 ± 0.3



SUGGESTED LAND PATTERN

- L = 7.7 mm ref.
- G = 2.5 mm ref.
- H = 3.5 mm ref.

Notes:

- (1) Based on ΔT approximately 40°C
- (2) L drops 20% typical

All test data based on 25°C ambient
Part temperature (ambient + temperature rise) must not exceed 125°C under worst case operating conditions.
Circuit design, components, PCB trace size, airflow and other cooling provisions all effect the part temperature.