

**SURFACE MOUNT MOLDING TYPE
POWER INDUCTOR SERIES MTPI0602**

FEATURES

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

ELECTRICAL SPECIFICATIONS

- Inductance range 0.47uH to 10.0uH
- Test frequency 100 KHz with test level 1.0 V
- Test equipment Quadtech 1910 L analyzer
- Rated current range 4.0 to 20.0 Amps
- Tolerance ± 20%
- Rated current Refer to notes below

PHYSICAL SPECIFICATIONS

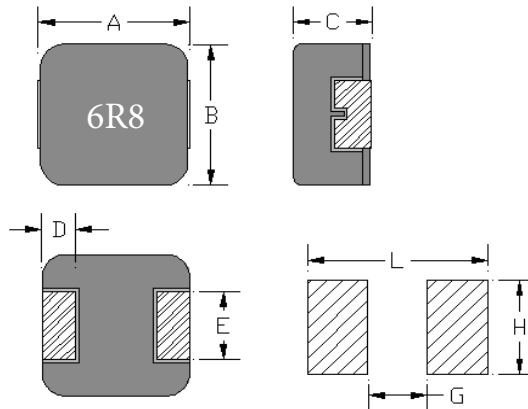
- Operating temp. -40°C to +125°C
- Core Mixed material
- Terminal construction Solder plating
- Packaging Box 3000 pieces per inner box
 T & R 1500 pieces per reel
- Tape & reel spec. Tape 16 mm embossed carrier
 Reel 330 mm reel

SPECIFICATIONS

Part Number	L (μH)	Tol % ±	DCR max (mΩ)	Rated Current (A)	
				I _{rms} ⁽¹⁾	I _{sat} ⁽²⁾
MTPI0602-R47M	0.47	20	8.3	11.7	20.0
MTPI0602-R68M	0.68	20	10.0	10.5	16.0
MTPI0602-1R0M	1.00	20	18.0	8.0	14.0
MTPI0602-2R2M	2.20	20	37.0	6.0	10.0
MTPI0602-3R3M	3.30	20	48.0	5.0	8.0
MTPI0602-4R7M	4.70	20	60.0	4.5	7.0
MTPI0602-5R6M	5.60	20	68.0	4.0	6.0
MTPI0602-6R8M	6.80	20	73.0	4.0	5.5
MTPI0602-100M	10.0	20	154.0	2.8	4.0

DIMENSIONS IN MILLIMETERS

- Length A 7.0 ± 0.3
- Width B 6.6 ± 0.3
- Height C 1.8 ± 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.