SURFACE MOUNT MOLDING TYPE POWER INDUCTOR SERIES MTPI0502

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 3.4 to 18.0 Amps
- Tolerance ± 20%
- Rated current Refer to notes below

SPECIFICATIONS

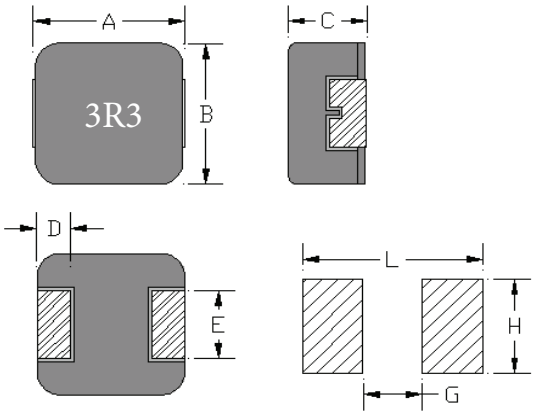
Part Number	L (µH)	Tol % ±	DCR max (mΩ)	Rated Current (A)	
				I_{rms} (1)	I_{sat} (2)
MTPI0502-R47M	0.47	20	8.6	11.5	18.0
MTPI0502-R68M	0.68	20	12.4	10.0	12.8
MTPI0502-1R0M	1.00	20	20.0	7.0	13.7
MTPI0502-2R2M	2.20	20	50.0	4.2	9.0
MTPI0502-3R3M	3.30	20	76.0	3.3	7.3
MTPI0502-4R7M	4.70	20	116.0	2.8	5.0
MTPI0502-5R6M	5.60	20	122.0	2.5	4.0
MTPI0502-6R8M	6.80	20	150.0	2.4	3.8
MTPI0502-100M	10.0	20	199.0	2.3	3.4

PHYSICAL SPECIFICATIONS

- Operating temp. -40ºC to +125ºC
- Core Mixed material
- Terminal construction Solder plating
- Packaging Box 6000 pieces per inner box
  T & R 3000 pieces per reel
- Tape & reel spec. Tape 12 mm embossed carrier
  Reel 330 mm reel

DIMENSIONS IN MILLIMETERS

- Length A 5.7 ± 0.3
- Width B 5.2 ± 0.2
- Height C 1.8 ± 0.2
- Terminal width D 1.1 ± 0.3
- Terminal length E 2.5 ± 0.3



SUGGESTED LAND PATTERN

- L = 6.2 mm ref.
- G = 2.2 mm ref.
- H = 2.8 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 contions.
Circuit design, components, PCB trace size, airflow and other cooling provisions all effect the part temperature.