SURFACE MOUNT MOLDING TYPE POWER INDUCTOR SERIES MTPI0512

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 0.33uH to 10.0uH
- Test frequency 100 KHz with test level 1.0 V
- Test equipment Quadtech 1910 L analyzer
- Rated current range 1.8 to 13.5 Amps
- Tolerance ± 20%
- Rated current Refer to notes below

PHYSICAL SPECIFICATIONS

- Operating temp. -40ºC to +125ºC
- Core Mixed material
- Terminal construction Solder plating
- Packaging Box 8000 pieces per inner box
  T & R 4000 pieces per reel
- Tape & reel spec. Tape 12 mm embossed carrier
  Reel 330 mm reel

DIMENSIONS IN MILLIMETERS

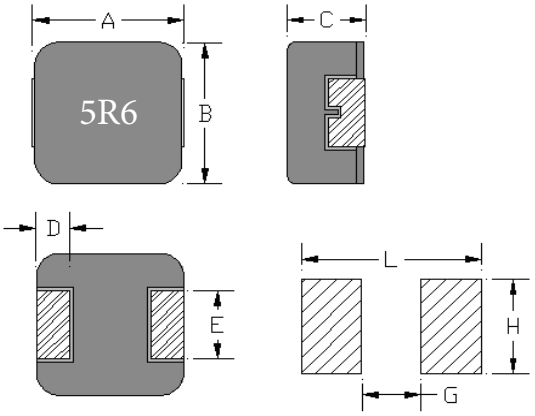
- Length A 5.7 ± 0.3
- Width B 5.2 ± 0.2
- Height C 1.0 ± 0.2
- Terminal width D 1.1 ± 0.3
- Terminal length E 2.5 ± 0.3

SUGGESTED LAND PATTERN

- L = 6.2 mm ref.
- G = 2.2 mm ref.
- H = 2.8 mm ref.

SPECIFICATIONS

Part Number	L (µH)	Tol % ±	DCR max (mΩ)	Rated Current (A)	
				I_{rms} (1)	I_{sat} (2)
MTPI0512-R33M	0.33	20	9.4	8.5	13.5
MTPI0512-R36M	0.36	20	11.5	8.0	13.0
MTPI0512-R47M	0.47	20	15.8	7.0	11.0
MTPI0512-R68M	0.68	20	24.5	6.0	9.0
MTPI0512-1R0M	1.00	20	30.0	5.0	6.0
MTPI0512-1R2M	1.20	20	40.0	4.5	5.5
MTPI0512-1R5M	1.50	20	44.0	4.0	5.0
MTPI0512-2R2M	2.20	20	75.0	3.5	4.0
MTPI0512-3R3M	3.30	20	86.0	3.0	3.8
MTPI0512-4R7M	4.70	20	115.0	2.5	3.2
MTPI0512-5R6M	5.60	20	201.0	2.4	3.2
MTPI0512-6R8M	6.80	20	222.0	2.0	3.0
MTPI0512-8R2M	8.20	20	379.0	1.7	2.8
MTPI0512-100M	10.0	20	385.0	1.5	1.8



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.