

**SURFACE MOUNT MOLDED TYPE
POWER INDUCTOR SERIES MTPI1004**

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 0.15uH to 10.0uH
- Test frequency 100 KHz with test level 1.0 V
- Test equipment Quadtech 1910 L analyzer
- Rated current range 12.0 to 75.0 Amps
- Tolerance ± 20% (M)
- Rated current Refer to notes below

PHYSICAL SPECIFICATIONS

- Operating temp. -40°C to +125°C
- Core Mixed material
- Terminal construction Solder plating
- Packaging Box 1000 pieces per inner box
 T & R 500 pieces per reel
- Tape & reel spec. Tape 24 mm embossed carrier
 Reel 330 mm reel

DIMENSIONS IN MILLIMETERS

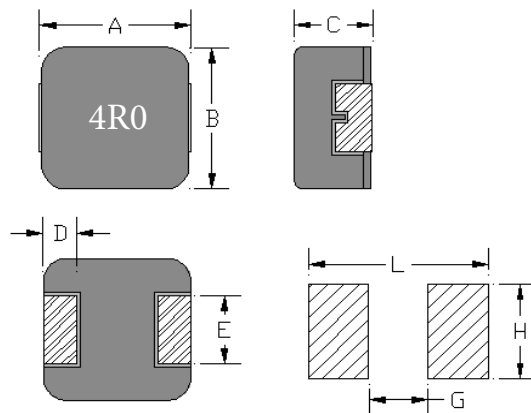
- Length A 11.0 ± 0.5
- Width B 10.0 ± 0.3
- Height C 3.8 ± 0.2
- Terminal width D 2.3 ± 0.3
- Terminal length E 3.0 ± 0.3

SUGGESTED LAND PATTERN

- L = 13.6 mm ref.
- G = 5.4 mm ref.
- H = 3.5 mm ref.

SPECIFICATIONS

Part Number	L (μH)	Tol % ±	DCR max (mΩ)	Rated Current (A)	
				I _{rms} ⁽¹⁾	I _{sat} ⁽²⁾
MTPI1004-R15M	0.15	20	0.6	43.0	75.0
MTPI1004-R22M	0.22	20	1.0	35.0	60.0
MTPI1004-R27M	0.27	20	1.0	33.0	60.0
MTPI1004-R30M	0.30	20	1.1	32.0	60.0
MTPI1004-R36M	0.36	20	1.2	31.0	60.0
MTPI1004-R39M	0.39	20	1.3	30.0	60.0
MTPI1004-R45M	0.45	20	1.5	29.0	46.0
MTPI1004-R47M	0.47	20	1.5	28.0	43.0
MTPI1004-R56M	0.56	20	1.8	25.0	40.0
MTPI1004-R68M	0.68	20	2.7	22.0	39.0
MTPI1004-1R0M	1.00	20	3.3	18.0	36.0
MTPI1004-1R5M	1.50	20	4.6	16.0	33.0
MTPI1004-2R2M	2.20	20	7.0	12.0	27.0
MTPI1004-2R5M	2.50	20	8.7	11.5	23.0
MTPI1004-3R3M	3.30	20	11.8	11.0	20.0
MTPI1004-4R0M	4.00	20	15.0	10.2	18.0
MTPI1004-4R7M	4.70	20	15.5	10.0	17.0
MTPI1004-5R6M	5.60	20	19.3	9.0	14.0
MTPI1004-6R8M	6.80	20	23.3	8.5	13.5
MTPI1004-8R2M	8.20	20	22.5	8.0	12.5
MTPI1004-100M	10.0	20	30.0	7.5	12.0



Notes:

- (1) Based on ΔT approximately 40°C rise
- (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.