

**SURFACE MOUNT MOLDED TYPE  
POWER INDUCTOR SERIES MTPI0615**

**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 10.0uH
- Test frequency        100 KHz with test level 1.0 V
- Test equipment        Quadtech 1910 L analyzer
- Rated current range    2.8 to 16.0 Amps
- Tolerance                ± 20%
- Rated current            Refer to notes below

**SPECIFICATIONS**

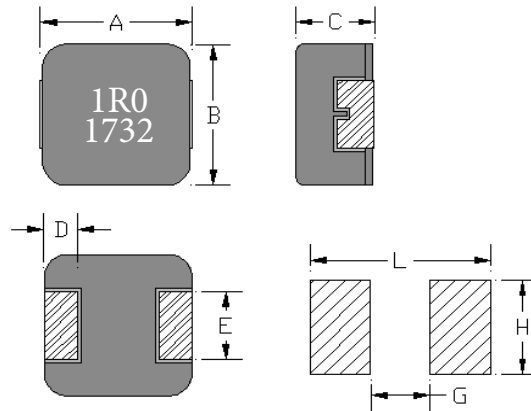
Part Number	L (μH)	Tol % ±	DCR max (mΩ)	Rated Current (A)	
				I <sub>rms</sub> <sup>(1)</sup>	I <sub>sat</sub> <sup>(2)</sup>
MTPI0615-R47M	0.47	20	10.3	9.5	16.0
MTPI0615-R68M	0.68	20	15.2	7.5	15.0
MTPI0615-1R0M	1.00	20	25.8	6.5	12.0
MTPI0615-2R2M	2.20	20	55.0	4.5	6.5
MTPI0615-3R3M	3.30	20	74.0	4.2	6.0
MTPI0615-4R7M	4.70	20	111.0	3.8	5.0
MTPI0615-5R6M	5.60	20	138.0	3.0	4.5
MTPI0615-6R8M	6.80	20	148.0	2.6	3.5
MTPI0615-100M	10.0	20	216.0	2.3	2.8

**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                1.3 ± 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.