

**SURFACE MOUNT MOLDED TYPE
POWER INDUCTOR SERIES MTPI0605**

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 0.22uH to 10.0uH
- Test frequency 100 KHz with test level 1.0 V
- Test equipment Quadtech 1910 L analyzer
- Rated current range 7.5 to 35.0 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 1600 pieces per inner box
 T & R 800 pieces per reel
- Tape & reel spec. Tape 16 mm embossed carrier
 Reel 330 mm reel

DIMENSIONS IN MILLIMETERS

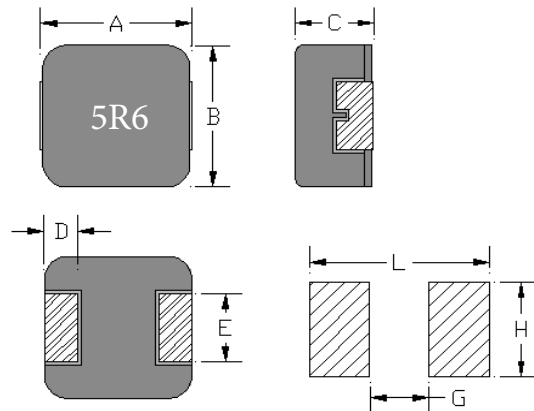
- Length A 7.3 ± 0.3
- Width B 6.6 ± 0.3
- Height C 4.8 ± 0.2
- Terminal width D 1.8 ± 0.3
- Terminal length E 3.0 ± 0.3

SUGGESTED LAND PATTERN

- L = 8.4 mm ref.
- G = 2.5 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⁾
MTPI0605-R22M	0.22	20	1.9	25.0	35.0
MTPI0605-R33M	0.33	20	3.0	25.0	32.0
MTPI0605-R40M	0.40	20	3.7	23.0	31.0
MTPI0605-R47M	0.47	20	3.9	22.0	30.0
MTPI0605-R56M	0.56	20	4.2	20.0	27.0
MTPI0605-R60M	0.60	20	4.3	19.0	25.0
MTPI0605-R68M	0.68	20	4.5	18.0	24.0
MTPI0605-R82M	0.82	20	4.9	16.5	22.0
MTPI0605-1R0M	1.00	20	6.5	15.0	20.0
MTPI0605-1R2M	1.20	20	7.5	14.0	18.0
MTPI0605-1R5M	1.50	20	9.0	12.0	16.5
MTPI0605-1R8M	1.80	20	11.0	12.0	15.0
MTPI0605-2R2M	2.20	20	12.0	10.0	14.0
MTPI0605-3R3M	3.30	20	20.9	8.0	12.0
MTPI0605-4R7M	4.70	20	30.8	6.5	10.0
MTPI0605-5R6M	5.60	20	49.0	6.0	9.0
MTPI0605-6R8M	6.80	20	51.5	5.5	8.5
MTPI0605-8R2M	8.20	20	63.0	5.0	8.0
MTPI0605-100M	10.0	20	69.0	4.0	7.5



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.