SURFACE MOUNT MOLDED TYPE POWER INDUCTOR SERIES MTPI1205

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 16.0 to 65.0 Amps
- Tolerance ± 20%
- Rated current Refer to notes below

SPECIFICATIONS

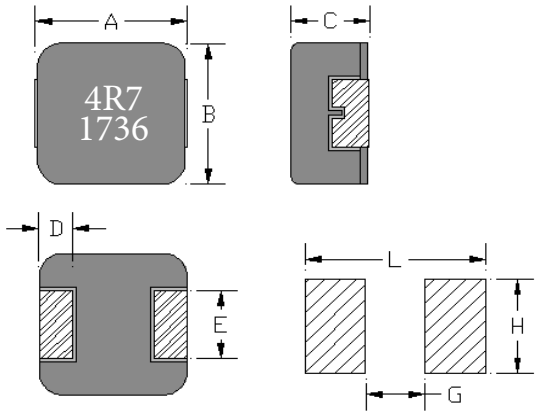
Part Number	L (µH)	Tol % ±	DCR max (mΩ)	Rated Current (A)	
				I_{rms} (1)	I_{sat} (2)
MTPI1205-R47M	0.47	20	1.1	38.0	65.0
MTPI1205-R68M	0.68	20	1.7	34.0	54.0
MTPI1205-1R0M	1.00	20	2.5	29.0	50.0
MTPI1205-2R2M	2.20	20	5.5	20.0	32.0
MTPI1205-3R3M	3.30	20	9.2	15.0	32.0
MTPI1205-4R7M	4.70	20	15.0	12.0	27.0
MTPI1205-5R6M	5.60	20	16.5	11.5	22.0
MTPI1205-6R8M	6.80	20	18.5	11.0	21.0
MTPI1205-8R2M	8.20	20	22.5	9.5	18.0
MTPI1205-100M	10.0	20	25.5	9.0	16.0

PHYSICAL SPECIFICATIONS

- Operating temp. -40ºC to +125ºC
- 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 13.50 ± 0.5
- Width B 12.5 ± 0.3
- Height C 4.8 ± 0.2
- Terminal width D 2.3 ± 0.3
- Terminal length E 4.7 ± 0.3



SUGGESTED LAND PATTERN

- L = 14.2 mm ref.
- G = 8.0 mm ref.
- H = 5.0 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.