SURFACE MOUNT MOLDED TYPE POWER INDUCTOR SERIES MTPI1707

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	0.45uH to 100.0uH
- Test frequency	100 KHz with test level 1.0 V
- Test equipment	Quadtech 1910 L analyzer
- Rated current range	6.5 to 85.0 Amps
- Tolerance	± 20%
- Rated current	Refer to notes below

PHYSICAL SPECIFICATIONS

- Operating temp.	-40°C to +125°C	
- Core	Mixed material	
- Terminal construction	Solder plating	
- Marking	L value & date code	
- Packaging	Box	400 pieces per inner box
	T & R	200 pieces per reel
- Tape & reel spec.	Tape	32 mm embossed carrier
	Reel	330 mm reel

DIMENSIONS IN MILLIMETERS

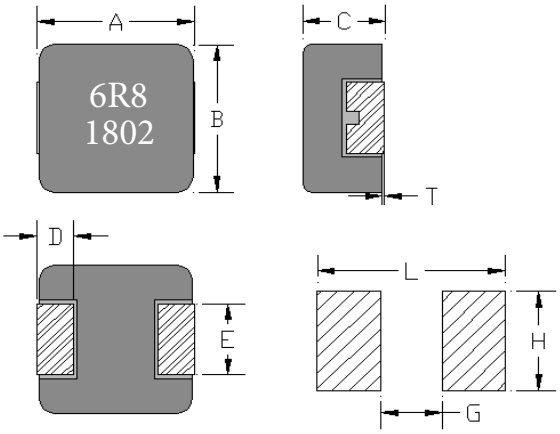
- Length A	17.6 ± 0.4
- Width B	16.9 ± 0.3
- Height C	6.7 ± 0.3
- Terminal width D	2.1 ± 0.3
- Terminal length E	11.9 ± 0.3
- Terminal thickness T	0.0~+0.25

SUGGESTED LAND PATTERN

- L = 18.5 mm ref.
- G = 12.2 mm ref.
- H = 12.5 mm ref.

SPECIFICATIONS

Part Number	L (µH)	Tol % ±	DCR max (mΩ)	Rated Current (A)	
				I_{rms} (1)	I_{sat} (2)
MTPI1707-R45M	0.45	20	0.96	62.0	85.0
MTPI1707-R47M	0.47	20	1.03	62.0	80.0
MTPI1707-1R0M	1.00	20	2.0	52.0	60.0
MTPI1707-1R3M	1.30	20	2.3	49.0	54.0
MTPI1707-1R5M	1.50	20	2.5	47.0	52.0
MTPI1707-1R8M	1.80	20	2.5	45.0	49.0
MTPI1707-2R2M	2.20	20	2.7	43.5	47.0
MTPI1707-3R3M	3.30	20	3.9	28.0	45.0
MTPI1707-4R7M	4.70	20	5.5	25.0	41.0
MTPI1707-5R6M	5.60	20	7.05	21.0	40.0
MTPI1707-6R8M	6.80	20	9.2	19.0	32.0
MTPI1707-7R4M	7.40	20	9.7	18.5	27.0
MTPI1707-8R2M	8.20	20	10.8	18.0	25.0
MTPI1707-100M	10.0	20	13.0	16.5	24.0
MTPI1707-150M	15.0	20	20.5	12.5	23.0
MTPI1707-220M	22.0	20	26.5	12.0	18.0
MTPI1707-330M	33.0	20	44.0	10.7	15.0
MTPI1707-390M	39.0	20	48.0	9.2	11.0
MTPI1707-470M	47.0	20	55.0	8.7	9.5
MTPI1707-560M	56.0	20	62.0	7.8	9.0
MTPI1707-680M	68.0	20	80.0	7.0	8.0
MTPI1707-820M	82.0	20	100.0	5.7	7.0
MTPI1707-101M	100.0	20	118.0	5.3	6.5



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.