# SURFACE MOUNT MOLDED TYPE POWER INDUCTOR SERIES MTPI0615

**SPECIFICATIONS** 

Part

Number

MTPI0615-R47M

MTPI0615-R68M

MTPI0615-1R0M

MTPI0615-2R2M

MTPI0615-3R3M

MTPI0615-4R7M

MTPI0615-5R6M

MTPI0615-6R8M

MTPI0615-100M

L

( µH )

0.47

0.68

1.00

2.20

3.30

4.70

5.60

6.80

10.0

Tol

%

 $\pm$ 

20

20

20

20

20

20

20

20

20

**DCR** 

max

 $(m\Omega)$ 

10.3

15.2

25.8

55.0

74.0

111.0

138.0

148.0

216.0

Rated

Current (A)

I (1)

9.5

7.5

6.5

4.5

4.2

3.8

3.0

2.6

2.3

 $I_{sat}^{\ (2)}$ 

16.0

15.0

12.0

6.5

6.0

5.0

4.5

3.5

2.8

#### **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 0.47uH to 10.0uH

Test frequency
Test equipment
100 KHz with test level 1.0 V
Quadtech 1910 L analyzer

- Rated current range 2.8 to 16.0 Amps

- Tolerance ± 20%

- Rated current Refer to notes below

#### PHYSICAL SPECIFICATIONS

Operating temp.
Core
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**

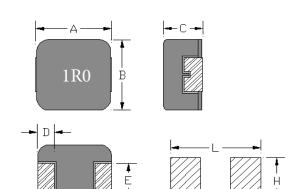
| - Length A          | $7.0 \pm 0.3$ |
|---------------------|---------------|
| - Width B           | $6.6 \pm 0.3$ |
| - Height C          | $1.3 \pm 0.2$ |
| - Terminal width D  | $1.8 \pm 0.3$ |
| - Terminal length E | $3.0 \pm 0.3$ |

#### 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 contions. Circuit design, components, PCB trace size, airflow and other cooling provisions all effect the part temperature.