# SURFACE MOUNT POWER INDUCTOR SERIES LPPI3010

**SPECIFICATIONS** 

Part

Number

LPPI3010-1R0Y

LPPI3010-1R5Y

LPPI3010-2R2M

LPPI3010-3R3M

LPPI3010-4R7M

LPPI3010-6R8M

LPPI3010-100M

LPPI3010-150M

LPPI3010-220M

L

(μH)

1.0

1.5

2.2

3.3

4.7

6.8

10.0

15.0

22.0

Tol

%

 $\pm$ 

30

30

20

20

20

20

20

20

20

## **FEATURES**

- Low profile
- High reliability and efficiency
- RoHS compliant plus Lead & Halogen free
- Magnetically shielded

#### **ELECTRICAL SPECIFICATIONS**

<ul> <li>Inductance range</li> </ul>	1.0uH to 22.0uH

Test frequency
 Test equipment
 1MHz with test level 0.1 V
 Quadtech 1910 L analyzer

Rated current range
 Tolerance
 Rated current
 U.43 to 2.1 Amps
 ± 20% (M) & ± 30% (Y)
 Refer to notes below

## PHYSICAL SPECIFICATIONS

Operating temp.
 Core
 -40°C to +125°C
 Ferrite core

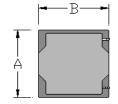
- Terminal construction Ag/Ni/Sn plating

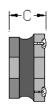
- Packaging
 - T & R 2000 pieces per reel
 - Tape & reel spec.
 Tape 8 mm embossed carrier

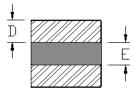
Reel 178 mm reel

## **DIMENSIONS IN MILLIMETERS**

- Length A	$3.0 \pm 0.2$
- Width B	$3.0 \pm 0.2$
- Height C	1.0 max.
- Terminal width D	1.0 ref.
- Terminal width D - Terminal pitch E	1.0 ref.







Rated

Current (A)

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

1.80

1.50

1.30

1.10

0.90

0.77

0.63

0.54

0.43

 $I_{rms}^{\phantom{rms}(1)}$ 

2.10

1.90

1.70

1.50

1.30

1.00

0.80

0.70

0.60

DCR

±20%

 $(m\Omega)$ 

55.0

70.0

90.0

130.0

170.0

260.0

350.0

510.0

750.0

# RECOMMENDED PC BOARD PATTERN

- -L = 3.2 mm ref.
- -G = 1.0 mm ref.
- H = 3.2 mm ref.

#### Notes

- (1) Based on coil temperature rise  $\Delta T$  approximately 40°C
- (2) L drops 30% from OCL 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.