# SURFACE MOUNT POWER INDUCTOR SERIES LPPI201610

### **FEATURES**

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

### **ELECTRICAL SPECIFICATIONS**

- Inductance range	0.4/uH to 22.0uH
- Test frequency	1MHz with test level 0.1 V
- Test equipment	Quadtech 1910 L analyzer
- Rated current range	0.27 to 2.70 Amps
- Tolerance	± 20% (M) & ± 30% (Y)
- Rated current	Refer to notes below

### PHYSICAL SPECIFICATIONS

<ul> <li>Operating temp.</li> </ul>	-40°C to +125°C			
- Core	Ferrite core			
	A /NT: /C 1 (			

- Terminal construction Ag/Ni/Sn plating

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

Reel 178 mm reel

# SPECIFICATIONS

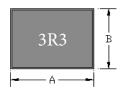
Part Number	L (µH)	Tol % ±	DCR (mΩ) ±20%	Rat Curre	
LPPI201610-R47Y	0.47	30	44	2.35	2.70
LPPI201610-R68Y	0.68	30	62	2.05	2.00
LPPI201610-1R0Y	1.0	30	80	1.60	1.80
LPPI201610-1R5Y	1.5	30	130	1.26	1.46
LPPI201610-2R2M	2.2	20	145	1.20	1.26
LPPI201610-3R3M	3.3	20	245	0.95	0.90
LPPI201610-4R7M	4.7	20	360	0.90	0.77
LPPI201610-6R8M	6.8	20	500	0.55	0.72
LPPI201610-100M	10.0	20	720	0.45	0.55
LPPI201610-150M	15.0	20	1400	0.36	0.45
LPPI201610-180M	18.0	20	1800	0.34	0.40
LPPI201610-220M	22.0	20	2000	0.27	0.38

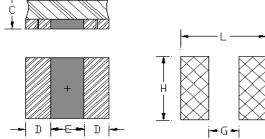
## **DIMENSIONS IN MILLIMETERS**

- Length A	2.0-0.1/+0.2
- Width B	1.6-0.1/+0.2
- Height C	1.0 max.
- Terminal width D	0.60 ref.
- Terminal pitch E	0.80 ref.

# RECOMMENDED PC BOARD PATTERN

- -L = 2.4 mm ref.
- -G = 0.8 mm ref.
- -H = 1.8 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.