

**SURFACE MOUNT POWER
INDUCTOR SERIES LPPI5020**

FEATURES

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

ELECTRICAL SPECIFICATIONS

- Inductance range 1.0uH to 47.0uH
- Test frequency 100KHz with test level 1 V
- Test equipment Quadtech 1910 L analyzer
- Rated current range 0.70 to 5.00 Amps
- Tolerance ± 20% (M) & ± 30% (Y)
- Rated current Refer to notes below

PHYSICAL SPECIFICATIONS

- Operating temp. -40°C to +125°C
- Core Ferrite core
- Terminal construction Ag/Ni/Sn plating +
Lead free solder
- Packaging T & R 2500 pieces per reel
- Tape & reel spec. Tape 12 mm embossed carrier
Reel 330 mm reel

DIMENSIONS IN MILLIMETERS

- Length A 5.0 ± 0.2
- Width B 5.0 ± 0.2
- Height C 1.8 ± 0.2
- Terminal width D 1.3 ± 0.2
- Terminal length E 4.7 ± 0.2
- Terminal center space F 3.7 ref.

RECOMMENDED PC BOARD PATTERN

- L = 5.1 mm ref.
- G = 2.1 mm ref.
- H = 4.7 mm ref.

Notes:

- (1) Based on coil temperature rise ΔT 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 conditions.
Circuit design, components, PCB trace size, airflow and other cooling provisions all effect the part temperature.

SPECIFICATIONS

Part Number	L (μ H)	Tol % ±	DCR ±20% (m Ω)	Rated Current (A)	
				I _{rms} ⁽¹⁾	I _{sat} ⁽²⁾
LPPI5020-1R0Y	1.00	30	20.0	4.10	5.00
LPPI5020-1R2Y	1.20	30	20.0	3.80	4.80
LPPI5020-1R5Y	1.50	30	25.0	3.50	4.50
LPPI5020-2R2Y	2.20	30	32.0	3.30	4.10
LPPI5020-2R2M	2.20	20	32.0	3.30	4.10
LPPI5020-2R7M	2.70	20	38.0	3.00	3.80
LPPI5020-2R9M	2.90	20	40.0	2.90	3.65
LPPI5020-3R3M	3.30	20	43.0	2.80	3.50
LPPI5020-4R7M	4.70	20	60.0	2.40	2.70
LPPI5020-5R6M	5.60	20	69.0	2.10	2.40
LPPI5020-6R8M	6.80	20	90.0	1.90	2.10
LPPI5020-8R2M	8.20	20	98.0	1.75	1.90
LPPI5020-100M	10.0	20	110.0	1.60	1.70
LPPI5020-120M	12.0	20	135.0	1.40	1.40
LPPI5020-150M	15.0	20	165.0	1.25	1.30
LPPI5020-180M	18.0	20	190.0	1.17	1.20
LPPI5020-220M	22.0	20	225.0	1.10	1.10
LPPI5020-330M	33.0	20	335.0	0.80	0.80
LPPI5020-470M	47.0	20	460.0	0.70	0.70

