

**SURFACE MOUNT POWER
INDUCTOR SERIES LPPI8040**

FEATURES

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

ELECTRICAL SPECIFICATIONS

- Inductance range 1.0uH to 220.0uH
- Test frequency 1MHz with test level 1 V
- Test equipment Quadtech 1910 L analyzer
- Rated current range 0.76 to 13.0 Amps
- Tolerance ± 10% (K), ± 15% (L),
 ± 20% (M) & ± 30% (Y)
- Rated current Refer to notes below

PHYSICAL SPECIFICATIONS

- Operating temp. -40°C to +125°C
- Core Ferrite core
- Terminal construction Copper foil + Lead free solder
- Packaging T & R 1000 pieces per reel
- Tape & reel spec. Tape 16 mm embossed carrier
 Reel 330 mm reel

DIMENSIONS IN MILLIMETERS

- Length A 8.0 ± 0.3
- Width B 8.0 ± 0.3
- Width B' 6.3 ± 0.2
- Height C For L < 10 uH 4.2 max.
 For L ≥ 10 uH 3.7 ± 0.3
- Terminal width D 2.0 ± 0.3
- Terminal length E 6.0 ± 0.3
- Terminal center space F 5.5 ± 0.3

RECOMMENDED PC BOARD PATTERN

- L = 8.5 mm ref.
- G = 2.5 mm ref.
- H = 6.3 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 contions.

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

SPECIFICATIONS

Part Number	L (µH)	Tol % ±	DCR ±20% (mΩ)	Rated Current (A)	
				I _{rms} ⁽¹⁾	I _{sat} ⁽²⁾
LPPI8040-1R0	1.00	20/30	8.2	8.00	13.0
LPPI8040-1R4	1.40	20/30	10.0	7.80	11.2
LPPI8040-1R5	1.50	20/30	10.0	7.70	11.0
LPPI8040-2R2	2.20	20/30	11.5	6.90	9.20
LPPI8040-3R3	3.30	20/30	15.0	6.20	7.50
LPPI8040-4R7	4.70	15~30	19.5	5.30	6.00
LPPI8040-5R6	5.60	15~30	22.0	5.20	5.80
LPPI8040-6R8	6.80	15~30	25.0	5.00	5.10
LPPI8040-100	10.0	10~30	33.0	4.20	4.30
LPPI8040-150	15.0	10~30	50.0	3.20	3.60
LPPI8040-220	22.0	10~30	73.0	2.45	2.80
LPPI8040-330	33.0	10~30	100.0	2.10	2.10
LPPI8040-470	47.0	10~30	135.0	1.70	1.90
LPPI8040-560	56.0	10~30	160.0	1.60	1.60
LPPI8040-680	68.0	10~30	205.0	1.50	1.50
LPPI8040-820	82.0	10~30	230.0	1.30	1.40
LPPI8040-101	100.0	10~30	300.0	1.10	1.20
LPPI8040-121	120.0	10~30	350.0	1.00	1.10
LPPI8040-151	150.0	10~30	410.0	0.90	1.03
LPPI8040-181	180.0	10~30	490.0	0.83	0.94
LPPI8040-221	220.0	10~30	610.0	0.76	0.90

