

# MPQ SERIES

## Radial Lead Power Inductors

### FEATURES

- RoHS compliant.
- Super low resistance, ultra high current rating.
- High performance (I sat) realized by metal dust core.
- Frequency Range: up to 1MHz.

### APPLICATIONS

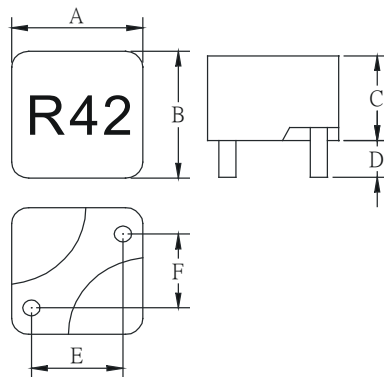
- Desktop PC, and server applications.
- High current power supplies.
- Battery powered devices.
- DC/DC converters in distributed power systems.
- DC/DC converters for field programmable gate array.

### PRODUCT IDENTIFICATION

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 MPQ - 1211 - R47 M M1

- ① Product Code
- ② Dimensions: 1211 = 12 x 12 x 11 mm
- ③ Inductance Code: R47 = 0.47μH
- ④ Tolerance: M = ±20%
- ⑤ Series Type : M1 Type

### PRODUCT SERIES



NOTES: DIMENSION IN mm

PART NO.	A	B	C	D	E	F
MPQ-1211	12.0±0.5	12.0±0.5	11.0Max.	3.5±0.5	6.5Typ.	7.6 Typ.
MPQ-1110	11.5±0.5	11.5±0.5	10.0 Max	3.4±0.5	6.3 Typ.	5.7 Typ.
MPQ-1008	10.0±0.5	10.0±0.5	8.0 Max	3.4±0.5	6.5 Typ.	4.5 Typ.

**MPQ-1211 SPECIFICATION**

PART NUMBER	Inductance Lo( $\mu$ H) $\pm$ 20% @0A	Rdc (m $\Omega$ ) Max	HEAT RATING CURRENT(I <sub>dc</sub> ) DC AMPS <sup>1</sup>	HEAT RATING CURRENT(I <sub>sat</sub> ) DC AMPS <sup>2</sup>
MPQ-1211-R30M	0.30	0.49	45	60
MPQ-1211-R42M	0.42	0.53	40	50
MPQ-1211-R56M	0.56	0.80	40	50
MPQ-1211-R68M	0.68	0.90	37	45
MPQ-1211-R80M	0.8	1.05	35	45
MPQ-1211-1R0M	1.0	1.45	30	40

**MPQ-1110 SPECIFICATION**

PART NUMBER	Inductance Lo( $\mu$ H) $\pm$ 20% @0A	Rdc (m $\Omega$ ) Max	HEAT RATING CURRENT(I <sub>dc</sub> ) DC AMPS <sup>1</sup>	HEAT RATING CURRENT(I <sub>sat</sub> ) DC AMPS <sup>2</sup>
MPQ-1110-R50M	0.5	0.92	40	40
MPQ-1110-R80M	0.8	1.20	35	35
MPQ-1110-1R0M	1.0	1.40	30	30

**MPQ-1008 SPECIFICATION**

PART NUMBER	Inductance Lo( $\mu$ H) $\pm$ 20% @0A	Rdc (m $\Omega$ ) Max	HEAT RATING CURRENT(I <sub>dc</sub> ) DC AMPS <sup>1</sup>	HEAT RATING CURRENT(I <sub>sat</sub> ) DC AMPS <sup>2</sup>
MPQ-1008-R25M	0.25	0.65	40	45
MPQ-1008-R50M	0.50	0.85	35	40
MPQ-1008-1R0M	1.0	1.80	28	30

**NOTES:**

1. I<sub>dc</sub> : DC current (A) that will cause an approximate  $\Delta$ T of 40°C
2. I<sub>sat</sub> : DC current (A) that will cause Lo to drop approximately 20%
3. All test data is referenced to 25°C ambient
4. Operating Temperature Range -55°C to +150°C
5. TEST FREQUENCY:100KHz,0.25V
6. TESTING INSTRUMENT L :Agilent4284A,WK4235,CH3302/G LCR METER  
CH1320,CH1320S BIAS CURRENT SOURCE  
Rdc :CH11025,GOM805 MICRO OHMMETER