



Features

- Formerly J. W. Miller® model
- Current rating up to 22.7 A
- Toroidal core
- RoHS compliant*

Applications

- Input/output of DC/DC converters
- Industrial electronics
- Power supplies for:
 - Portable communications equipment
 - Camcorders
 - LCD TVs

PM2110 Series - High Current SMD Power Inductors

Electrical Specifications

| Bourns Part No. | Inductance 1 kHz | | DCR Max. (mΩ) | Idc (A) | Dim. A Max. mm/(in.) |
|-----------------|------------------|----------|---------------------|------------|----------------------------|
| | (μH) | Tol. (%) | | | |
| PM2110-1R0M-RC | 1.0 | ±20 | 2 | 22.7 | 14.48 / (0.57) |
| PM2110-1R2M-RC | 1.2 | ±20 | 2 | 20.3 | 14.48 / (0.57) |
| PM2110-1R5M-RC | 1.5 | ±20 | 2 | 20.3 | 14.48 / (0.57) |
| PM2110-1R8M-RC | 1.8 | ±20 | 3 | 18.5 | 14.48 / (0.57) |
| PM2110-2R2M-RC | 2.2 | ±20 | 3 | 17.2 | 14.48 / (0.57) |
| PM2110-2R7M-RC | 2.7 | ±20 | 4 | 16.0 | 14.48 / (0.57) |
| PM2110-3R3M-RC | 3.3 | ±20 | 4 | 16.0 | 14.48 / (0.57) |
| PM2110-3R9M-RC | 3.9 | ±20 | 4 | 15.1 | 14.48 / (0.57) |
| PM2110-4R7M-RC | 4.7 | ±20 | 4 | 14.4 | 14.48 / (0.57) |
| PM2110-5R6M-RC | 5.6 | ±20 | 5 | 13.7 | 14.48 / (0.57) |
| PM2110-6R8M-RC | 6.8 | ±20 | 5 | 13.1 | 14.48 / (0.57) |
| PM2110-8R2M-RC | 8.2 | ±20 | 6 | 12.6 | 14.48 / (0.57) |
| PM2110-100K-RC | 10 | ±10 | 7 | 11.7 | 14.48 / (0.57) |
| PM2110-120K-RC | 12 | ±10 | 7 | 11.3 | 14.48 / (0.57) |
| PM2110-150K-RC | 15 | ±10 | 8 | 10.7 | 14.48 / (0.57) |
| PM2110-180K-RC | 18 | ±10 | 9 | 10.2 | 14.48 / (0.57) |
| PM2110-220K-RC | 22 | ±10 | 10 | 9.7 | 14.48 / (0.57) |
| PM2110-270K-RC | 27 | ±10 | 14 | 8.2 | 13.72 / (0.54) |
| PM2110-330K-RC | 33 | ±10 | 19 | 7.0 | 13.21 / (0.52) |
| PM2110-390K-RC | 39 | ±10 | 20 | 6.8 | 15.75 / (0.62) |
| PM2110-470K-RC | 47 | ±10 | 22 | 6.5 | 15.75 / (0.62) |
| PM2110-560K-RC | 56 | ±10 | 24 | 6.2 | 15.75 / (0.62) |
| PM2110-680K-RC | 68 | ±10 | 27 | 5.9 | 15.75 / (0.62) |
| PM2110-820K-RC | 82 | ±10 | 29 | 5.6 | 15.75 / (0.62) |
| PM2110-101K-RC | 100 | ±10 | 32 | 5.4 | 15.75 / (0.62) |
| PM2110-121K-RC | 120 | ±10 | 35 | 5.1 | 15.75 / (0.62) |
| PM2110-151K-RC | 150 | ±10 | 49 | 4.3 | 14.99 / (0.59) |
| PM2110-181K-RC | 180 | ±10 | 66 | 3.7 | 13.46 / (0.53) |
| PM2110-221K-RC | 220 | ±10 | 74 | 3.5 | 15.24 / (0.60) |
| PM2110-271K-RC | 270 | ±10 | 82 | 3.4 | 15.24 / (0.60) |
| PM2110-331K-RC | 330 | ±10 | 90 | 3.2 | 15.24 / (0.60) |
| PM2110-391K-RC | 390 | ±10 | 98 | 3.1 | 15.24 / (0.60) |
| PM2110-471K-RC | 470 | ±10 | 133 | 2.6 | 14.48 / (0.57) |
| PM2110-561K-RC | 560 | ±10 | 146 | 2.5 | 14.48 / (0.57) |
| PM2110-681K-RC | 680 | ±10 | 202 | 2.1 | 13.72 / (0.54) |
| PM2110-821K-RC | 820 | ±10 | 221 | 2.0 | 15.24 / (0.60) |
| PM2110-102K-RC | 1000 | ±10 | 244 | 1.9 | 15.24 / (0.60) |

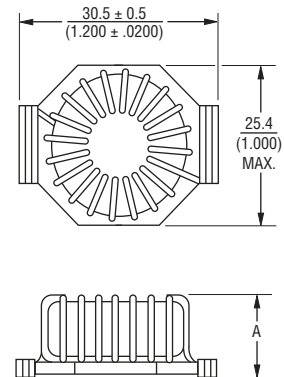
General Specifications

Test Voltage 0.1 V
 Operating Temperature -55 °C to +105 °C
 (Temperature rise included)
 Storage Temperature -55 °C to +105 °C
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

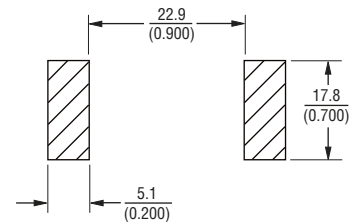
Materials

Core Iron
 Wire Enameled copper
 Adhesive Epoxy resin
 Terminal Sn/Ag/Cu
 Rated Current See "Inductance vs. Current" table
 Temperature Rise 30 °C typical at Idc
 Packaging 77 pcs. per box

Product Dimensions

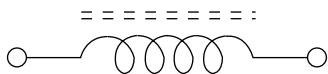


Recommended Pad Layout

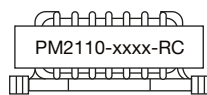


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Electrical Schematic



Typical Part Marking



WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
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PM2110 Series - High Current SMD Power Inductors

BOURNS®

Inductance vs. Current

| L (μH) | Idc (A) to decrease L by 10 % | Idc (A) to decrease L by 20 % | Idc (A) to decrease L by 30 % | Idc (A) to decrease L by 40 % | Idc (A) to decrease L by 50 % |
|--------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 | 17.0 | 22.7 | 37.0 | 50.0 | 66.0 |
| 1.2 | 13.5 | 21.2 | 30.0 | 40.0 | 53.0 |
| 1.5 | 13.2 | 21.0 | 29.9 | 39.8 | 52.8 |
| 1.8 | 11.1 | 17.9 | 25.0 | 33.5 | 44.5 |
| 2.2 | 9.50 | 15.4 | 21.9 | 28.6 | 38.1 |
| 2.7 | 8.30 | 13.5 | 18.8 | 25.1 | 33.5 |
| 3.3 | 8.30 | 13.4 | 18.8 | 25.0 | 33.4 |
| 3.9 | 7.40 | 11.9 | 16.6 | 22.4 | 29.8 |
| 4.7 | 6.70 | 10.7 | 15.0 | 20.1 | 26.8 |
| 5.6 | 6.10 | 9.70 | 13.6 | 18.2 | 24.4 |
| 6.8 | 5.55 | 8.90 | 12.5 | 16.7 | 22.3 |
| 8.2 | 5.15 | 8.25 | 11.5 | 15.5 | 20.6 |
| 10 | 4.45 | 7.05 | 9.95 | 13.4 | 17.8 |
| 12 | 4.15 | 6.70 | 9.35 | 12.6 | 16.7 |
| 15 | 3.70 | 5.95 | 8.30 | 11.2 | 14.9 |
| 18 | 3.35 | 5.35 | 7.50 | 10.1 | 13.4 |
| 22 | 2.80 | 4.84 | 6.80 | 9.15 | 12.1 |
| 27 | 2.65 | 4.17 | 5.97 | 8.02 | 10.7 |
| 33 | 2.40 | 3.80 | 5.35 | 7.25 | 9.55 |
| 39 | 2.20 | 3.53 | 5.00 | 6.70 | 8.90 |
| 47 | 2.05 | 3.25 | 4.54 | 6.05 | 8.10 |
| 56 | 1.85 | 2.98 | 4.15 | 5.55 | 7.50 |
| 68 | 1.67 | 2.67 | 3.75 | 5.02 | 6.70 |
| 82 | 1.51 | 2.43 | 3.40 | 4.45 | 6.08 |
| 100 | 1.39 | 2.23 | 3.11 | 4.18 | 5.58 |
| 120 | 1.26 | 2.02 | 2.82 | 3.78 | 5.05 |
| 150 | 1.13 | 1.81 | 2.54 | 3.40 | 4.54 |
| 180 | 1.03 | 1.64 | 2.30 | 3.08 | 4.12 |
| 220 | 0.93 | 1.45 | 2.08 | 2.79 | 3.70 |
| 270 | 0.83 | 1.34 | 1.86 | 2.51 | 3.35 |
| 330 | 0.76 | 1.21 | 1.70 | 2.28 | 3.04 |
| 390 | 0.69 | 1.11 | 1.56 | 2.07 | 2.79 |
| 470 | 0.64 | 1.02 | 1.42 | 1.91 | 2.55 |
| 560 | 0.58 | 0.93 | 1.30 | 1.74 | 2.33 |
| 680 | 0.53 | 0.84 | 1.17 | 1.58 | 2.11 |
| 820 | 0.48 | 0.77 | 1.07 | 1.44 | 1.93 |
| 1000 | 0.43 | 0.69 | 0.97 | 1.30 | 1.74 |

REV. 03/18

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Users should verify actual device performance in their specific applications.

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