



## 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
  - Car radios

# PM2110 Series - High Current SMD Power Inductors

### Electrical Specifications

Bourns Part No.	Inductance 1 kHz		DCR Max. (mΩ)	I <sub>dc</sub> (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)

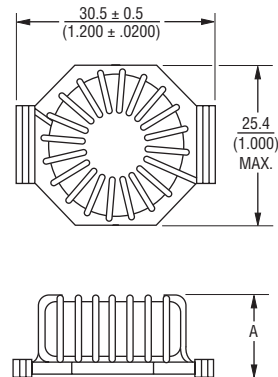
### General Specifications

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

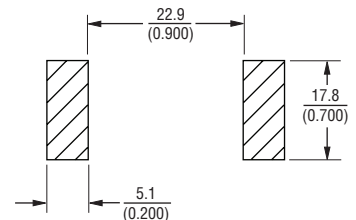
### Materials

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 I<sub>dc</sub>  
 Packaging ..... 77 pcs. per box

### Product Dimensions

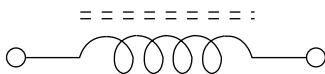


### Recommended Pad Layout

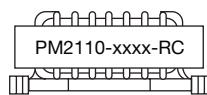


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

### Electrical Schematic



### Typical Part Marking



\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

# 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. 12/17

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