



## 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		Test Frequency (MHz)	DCR Max. (mΩ)	Idc (A)	Dim. A Max. mm/(in.)
	(μH)	Tol. (%)				
PM2110-1R0M-RC	1.0	±20	7.96	2	22.7	14.48 / (0.57)
PM2110-1R2M-RC	1.2	±20	7.96	2	20.3	14.48 / (0.57)
PM2110-1R5M-RC	1.5	±20	7.96	2	20.3	14.48 / (0.57)
PM2110-1R8M-RC	1.8	±20	7.96	3	18.5	14.48 / (0.57)
PM2110-2R2M-RC	2.2	±20	7.96	3	17.2	14.48 / (0.57)
PM2110-2R7M-RC	2.7	±20	7.96	4	16.0	14.48 / (0.57)
PM2110-3R3M-RC	3.3	±20	7.96	4	16.0	14.48 / (0.57)
PM2110-3R9M-RC	3.9	±20	7.96	4	15.1	14.48 / (0.57)
PM2110-4R7M-RC	4.7	±20	7.96	4	14.4	14.48 / (0.57)
PM2110-5R6M-RC	5.6	±20	7.96	5	13.7	14.48 / (0.57)
PM2110-6R8M-RC	6.8	±20	7.96	5	13.1	14.48 / (0.57)
PM2110-8R2M-RC	8.2	±20	7.96	6	12.6	14.48 / (0.57)
PM2110-100K-RC	10	±10	2.52	7	11.7	14.48 / (0.57)
PM2110-120K-RC	12	±10	2.52	7	11.3	14.48 / (0.57)
PM2110-150K-RC	15	±10	2.52	8	10.7	14.48 / (0.57)
PM2110-180K-RC	18	±10	2.52	9	10.2	14.48 / (0.57)
PM2110-220K-RC	22	±10	2.52	10	9.7	14.48 / (0.57)
PM2110-270K-RC	27	±10	2.52	14	8.2	13.72 / (0.54)
PM2110-330K-RC	33	±10	2.52	19	7.0	13.21 / (0.52)
PM2110-390K-RC	39	±10	2.52	20	6.8	15.75 / (0.62)
PM2110-470K-RC	47	±10	2.52	22	6.5	15.75 / (0.62)
PM2110-560K-RC	56	±10	2.52	24	6.2	15.75 / (0.62)
PM2110-680K-RC	68	±10	2.52	27	5.9	15.75 / (0.62)
PM2110-820K-RC	82	±10	2.52	29	5.6	15.75 / (0.62)
PM2110-101K-RC	100	±10	0.796	32	5.4	15.75 / (0.62)
PM2110-121K-RC	120	±10	0.796	35	5.1	15.75 / (0.62)
PM2110-151K-RC	150	±10	0.796	49	4.3	14.99 / (0.59)
PM2110-181K-RC	180	±10	0.796	66	3.7	13.46 / (0.53)
PM2110-221K-RC	220	±10	0.796	74	3.5	15.24 / (0.60)
PM2110-271K-RC	270	±10	0.796	82	3.4	15.24 / (0.60)
PM2110-331K-RC	330	±10	0.796	90	3.2	15.24 / (0.60)
PM2110-391K-RC	390	±10	0.796	98	3.1	15.24 / (0.60)
PM2110-471K-RC	470	±10	0.796	133	2.6	14.48 / (0.57)
PM2110-561K-RC	560	±10	0.796	146	2.5	14.48 / (0.57)
PM2110-681K-RC	680	±10	0.796	202	2.1	13.72 / (0.54)
PM2110-821K-RC	820	±10	0.796	221	2.0	15.24 / (0.60)
PM2110-102K-RC	1000	±10	0.252	244	1.9	15.24 / (0.60)

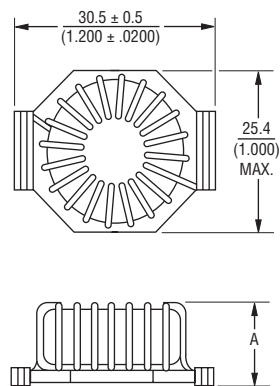
## General Specifications

Test Voltage.....0.1 V  
 Reflow Soldering .....245 °C; 5 seconds  
 Operating Temperature...-55 °C to +105 °C  
 (Temperature rise included)  
 Storage Temperature...-55 °C to +105 °C  
 Resistance to Soldering Heat  
 .....260 °C, 10 sec. max.

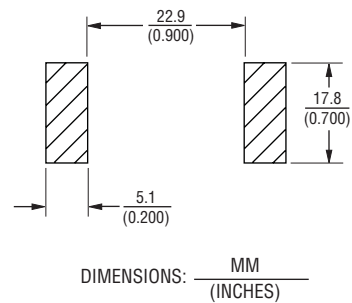
## Materials

Core.....Iron  
 Wire.....Enamelled 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

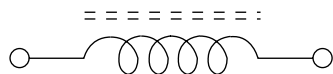
## Product Dimensions



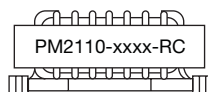
## Recommended Layout



## Electrical Schematic



## Typical Part Marking



\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex  
 Specifications are subject to change without notice.  
 Customers 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