BOURNS®

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 (µH)	Inductance 1 kHz Tol. (%)	Test Frequency (MHz)	DCR Max. (mΩ)	Idc (A)	Dim. A Max. mm/(in.)
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)

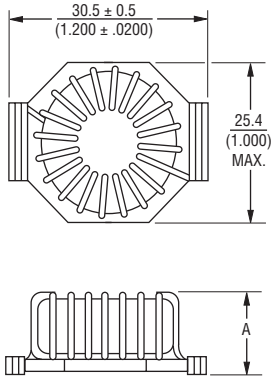
General Specifications

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.

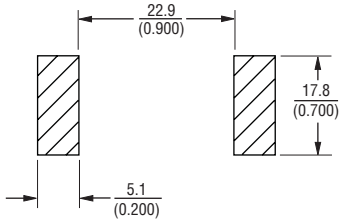
Materials

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

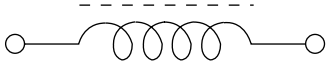


Recommended Layout

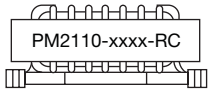


DIMENSIONS: MM / (INCHES)

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.

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