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

PM2110 Series - High Current SMD Power Inductors

Electrical Specifications

Bourns Part No.	Inductance 1 kHz (µH)	Inductance 1 kHz Tol. (%)	DCR Max. (mΩ)	Idc (A)	Dim. A Max. mm/(in.)
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)

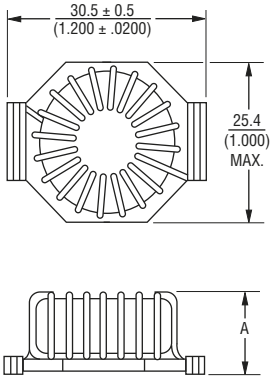
General Specifications

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

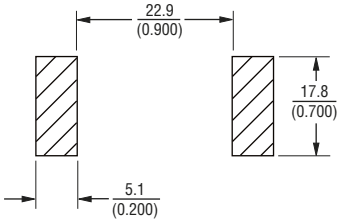
Materials

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

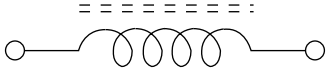


Recommended Pad Layout

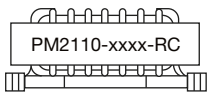


DIMENSIONS: MM / (INCHES)

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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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

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