



BOURNS®

Features

- Formerly J.W. Miller® model
- Current rating up to 25.4 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

PM2120 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. (%)			
PM2120-1R0M-RC	1.0	±20	2	25.4	20.83 / (0.82)
PM2120-1R2M-RC	1.2	±20	2	25.4	20.83 / (0.82)
PM2120-1R5M-RC	1.5	±20	3	22.0	20.83 / (0.82)
PM2120-1R8M-RC	1.8	±20	3	22.0	20.83 / (0.82)
PM2120-2R2M-RC	2.2	±20	3	19.7	20.83 / (0.82)
PM2120-2R7M-RC	2.7	±20	3	19.7	20.83 / (0.82)
PM2120-3R3M-RC	3.3	±20	4	18.0	20.83 / (0.82)
PM2120-3R9M-RC	3.9	±20	4	18.0	20.83 / (0.82)
PM2120-4R7M-RC	4.7	±20	5	16.6	20.83 / (0.82)
PM2120-5R6M-RC	5.6	±20	5	15.6	20.83 / (0.82)
PM2120-6R8M-RC	6.8	±20	6	14.7	20.83 / (0.82)
PM2120-8R2M-RC	8.2	±20	6	14.7	20.83 / (0.82)
PM2120-100K-RC	10	±10	7	13.9	20.83 / (0.82)
PM2120-120K-RC	12	±10	8	12.7	20.83 / (0.82)
PM2120-150K-RC	15	±10	9	12.2	20.83 / (0.82)
PM2120-180K-RC	18	±10	9	11.8	20.83 / (0.82)
PM2120-220K-RC	22	±10	11	11.0	20.83 / (0.82)
PM2120-270K-RC	27	±10	12	10.4	20.83 / (0.82)
PM2120-330K-RC	33	±10	13	10.1	20.83 / (0.82)
PM2120-390K-RC	39	±10	14	9.6	20.83 / (0.82)
PM2120-470K-RC	47	±10	19	8.2	20.07 / (0.79)
PM2120-560K-RC	56	±10	21	7.9	20.07 / (0.79)
PM2120-680K-RC	68	±10	29	6.7	19.56 / (0.77)
PM2120-820K-RC	82	±10	32	6.4	22.10 / (0.87)
PM2120-101K-RC	100	±10	35	6.1	22.10 / (0.87)
PM2120-121K-RC	120	±10	39	5.8	22.10 / (0.87)
PM2120-151K-RC	150	±10	43	5.5	22.10 / (0.87)
PM2120-181K-RC	180	±10	47	5.3	21.08 / (0.83)
PM2120-221K-RC	220	±10	52	5.0	21.08 / (0.83)
PM2120-271K-RC	270	±10	72	4.2	20.32 / (0.80)
PM2120-331K-RC	330	±10	100	3.6	19.81 / (0.78)
PM2120-391K-RC	390	±10	108	3.5	19.81 / (0.78)
PM2120-471K-RC	470	±10	119	3.3	21.59 / (0.85)
PM2120-561K-RC	560	±10	130	3.2	21.59 / (0.85)
PM2120-681K-RC	680	±10	142	3.0	21.59 / (0.85)
PM2120-821K-RC	820	±10	157	2.9	21.59 / (0.85)
PM2120-102K-RC	1000	±10	215	2.5	20.83 / (0.82)

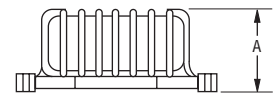
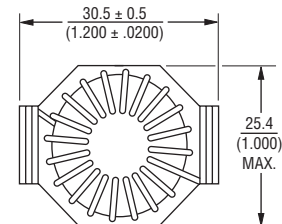
General Specifications

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.

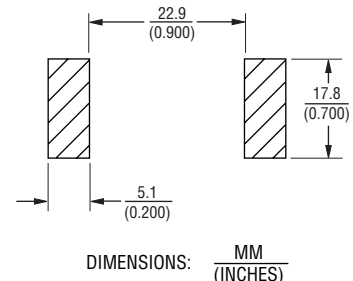
Materials

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

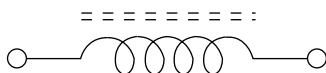
Product Dimensions



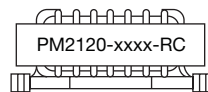
Recommended Pad Layout



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. Customers should verify actual device performance in their specific applications.

PM2120 Series - High Current SMD Power Inductors

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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	15.3	24.5	34.4	45.9	61.3
1.2	17.4	27.9	39.2	52.2	69.7
1.5	15.8	25.3	35.6	47.4	63.3
1.8	14.6	23.4	32.9	43.8	58.5
2.2	13.1	21.0	29.5	39.3	52.5
2.7	11.7	18.7	26.3	35.1	46.9
3.3	15.1	24.2	34.0	45.3	60.5
3.9	9.70	15.5	21.8	29.1	38.9
4.7	8.90	14.3	20.0	26.7	35.7
5.6	8.10	13.0	18.2	24.3	32.4
6.8	7.40	11.9	16.7	22.2	29.6
8.2	6.70	10.7	15.1	20.1	26.8
10	6.10	9.77	13.7	18.3	24.4
12	5.60	8.97	12.6	16.8	22.4
15	4.90	7.85	11.0	14.7	19.6
18	4.60	7.37	10.4	13.8	18.4
22	4.10	6.57	9.23	12.3	16.4
27	3.70	5.93	8.33	11.1	14.8
33	3.35	5.37	7.54	10.1	13.4
39	3.10	4.97	6.98	9.30	12.4
47	2.80	4.49	6.30	8.40	11.2
56	2.55	4.09	5.74	7.65	10.2
68	2.35	3.76	5.29	7.05	9.41
82	2.15	3.44	4.84	6.45	8.61
100	1.92	3.08	4.32	5.76	7.69
120	1.75	2.80	3.94	5.25	7.01
150	1.58	2.53	3.56	4.74	6.33
180	1.43	2.29	3.22	4.29	5.73
220	1.30	2.08	2.93	3.90	5.21
270	1.18	1.89	2.66	3.54	4.73
330	1.11	1.78	2.50	3.33	4.45
390	0.97	1.55	2.18	2.91	3.89
470	0.89	1.43	2.00	2.67	3.57
560	0.81	1.30	1.82	2.43	3.24
680	0.74	1.19	1.67	2.22	2.96
820	0.67	1.07	1.51	2.01	2.68
1000	0.61	0.98	1.37	1.83	2.44