



## Features

- Formerly *JW.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)	I <sub>dc</sub> (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	20.10 / (0.87)
PM2120-101K-RC	100	±10	35	6.1	20.10 / (0.87)
PM2120-121K-RC	120	±10	39	5.8	20.10 / (0.87)
PM2120-151K-RC	150	±10	43	5.5	20.10 / (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)

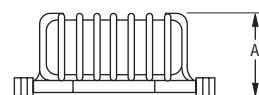
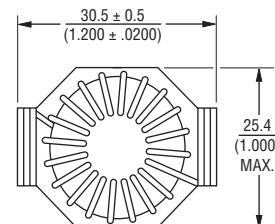
### General Specifications

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.

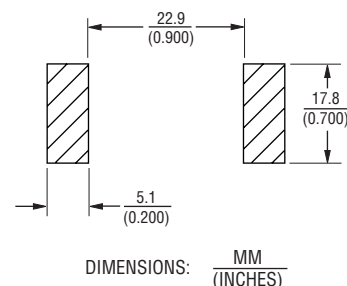
### Materials

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

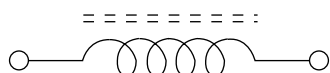
### Product Dimensions



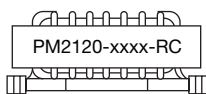
### Recommended Pad Layout



### Electrical Schematic



### Typical Part Marking



\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

# PM2120 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	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

REV. 03/10

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Customers should verify actual device performance in their specific applications.