



## 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

# 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	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)

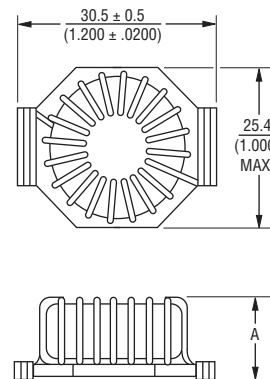
### General Specifications

Test Voltage ..... 0.1 V  
 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

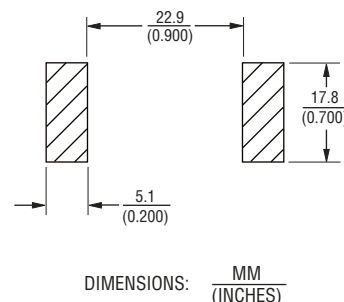
### Materials

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

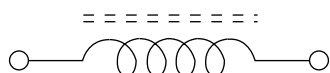
### Product Dimensions



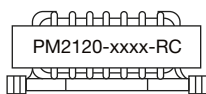
### Recommended Pad Layout



### Electrical Schematic



### Typical Part Marking



**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://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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# 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. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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