



## 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)	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)

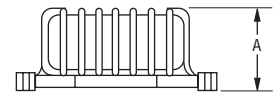
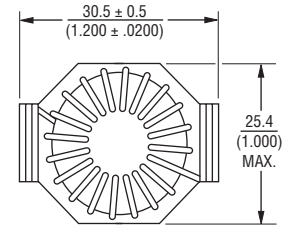
## General Specifications

Test Voltage ..... 0.1 V  
 Operating Temperature ..... -55 °C to +105 °C  
 (Temperature rise included)  
 Storage Temperature ... -55 °C to +105 °C  
 Moisture Sensivity Level ..... 1  
 ESD Classification (HBM)..... N/A

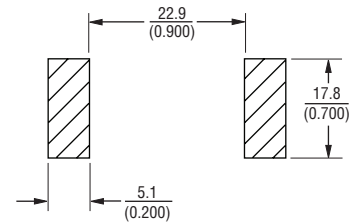
## Materials

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 ..... 63 pcs. per box

## Product Dimensions

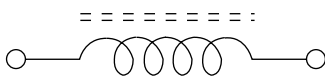


## Recommended Pad Layout



DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

## Electrical Schematic



## Typical Part Marking



## Additional Information

Click these links for more information:



\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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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. 04/25

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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