



Features

- Formerly *JWMiller* 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		Test Frequency (MHz)	DCR Max. (mΩ)	Idc (A)	Dim. A Max. mm/(in.)
	(μH)	Tol. (%)				
PM2120-1R0M-RC	1.0	±20	7.96	2	25.4	20.83 / (0.82)
PM2120-1R2M-RC	1.2	±20	7.96	2	25.4	20.83 / (0.82)
PM2120-1R5M-RC	1.5	±20	7.96	3	22.0	20.83 / (0.82)
PM2120-1R8M-RC	1.8	±20	7.96	3	22.0	20.83 / (0.82)
PM2120-2R2M-RC	2.2	±20	7.96	3	19.7	20.83 / (0.82)
PM2120-2R7M-RC	2.7	±20	7.96	3	19.7	20.83 / (0.82)
PM2120-3R3M-RC	3.3	±20	7.96	4	18.0	20.83 / (0.82)
PM2120-3R9M-RC	3.9	±20	7.96	4	18.0	20.83 / (0.82)
PM2120-4R7M-RC	4.7	±20	7.96	5	16.6	20.83 / (0.82)
PM2120-5R6M-RC	5.6	±20	7.96	5	15.6	20.83 / (0.82)
PM2120-6R8M-RC	6.8	±20	7.96	6	14.7	20.83 / (0.82)
PM2120-8R2M-RC	8.2	±20	7.96	6	14.7	20.83 / (0.82)
PM2120-100K-RC	10	±10	2.52	7	13.9	20.83 / (0.82)
PM2120-120K-RC	12	±10	2.52	8	12.7	20.83 / (0.82)
PM2120-150K-RC	15	±10	2.52	9	12.2	20.83 / (0.82)
PM2120-180K-RC	18	±10	2.52	9	11.8	20.83 / (0.82)
PM2120-220K-RC	22	±10	2.52	11	11.0	20.83 / (0.82)
PM2120-270K-RC	27	±10	2.52	12	10.4	20.83 / (0.82)
PM2120-330K-RC	33	±10	2.52	13	10.1	20.83 / (0.82)
PM2120-390K-RC	39	±10	2.52	14	9.6	20.83 / (0.82)
PM2120-470K-RC	47	±10	2.52	19	8.2	20.07 / (0.79)
PM2120-560K-RC	56	±10	2.52	21	7.9	20.07 / (0.79)
PM2120-680K-RC	68	±10	2.52	29	6.7	19.56 / (0.77)
PM2120-820K-RC	82	±10	2.52	32	6.4	20.10 / (0.87)
PM2120-101K-RC	100	±10	0.796	35	6.1	20.10 / (0.87)
PM2120-121K-RC	120	±10	0.796	39	5.8	20.10 / (0.87)
PM2120-151K-RC	150	±10	0.796	43	5.5	20.10 / (0.87)
PM2120-181K-RC	180	±10	0.796	47	5.3	21.08 / (0.83)
PM2120-221K-RC	220	±10	0.796	52	5.0	21.08 / (0.83)
PM2120-271K-RC	270	±10	0.796	72	4.2	20.32 / (0.80)
PM2120-331K-RC	330	±10	0.796	100	3.6	19.81 / (0.78)
PM2120-391K-RC	390	±10	0.796	108	3.5	19.81 / (0.78)
PM2120-471K-RC	470	±10	0.796	119	3.3	21.59 / (0.85)
PM2120-561K-RC	560	±10	0.796	130	3.2	21.59 / (0.85)
PM2120-681K-RC	680	±10	0.796	142	3.0	21.59 / (0.85)
PM2120-821K-RC	820	±10	0.796	157	2.9	21.59 / (0.85)
PM2120-102K-RC	1000	±10	0.252	215	2.5	20.83 / (0.82)

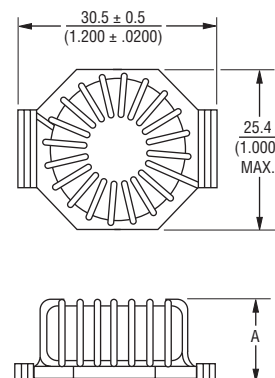
General Specifications

Test Voltage.....0.1 V
 Reflow Soldering245 °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.

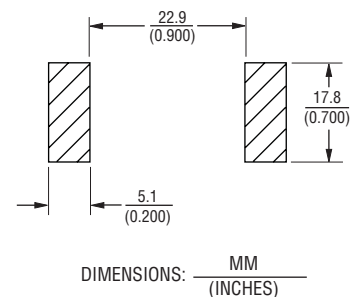
Materials

Core.....Iron
 Wire.....Enamelled copper
 Adhesive.....Epoxy resin
 Terminal.....Sn/Ag/Cu
 Rated Current
See "Inductance vs. Current" table
 Temperature Rise
30 °C typical at Idc
 Packaging77 pcs. per box

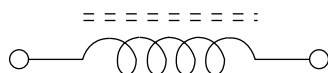
Product Dimensions



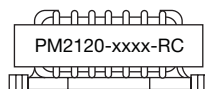
Recommended Layout



Electrical Schematic



Typical Part Marking



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