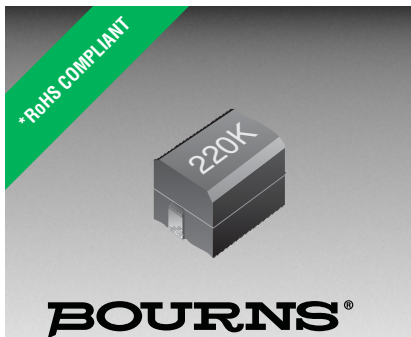




Features

- Formerly J.W. Miller® model
- High resistance to heat and humidity
- Resistance to mechanical shock and pressure
- Accurate dimensions for automatic surface mounting
- Wide inductance range (1.0 nH to 1000 µH)
- RoHS compliant*



Model PM1210-181J-RC and PM1210-221J-RC are currently available, but not recommended for new designs.

Applications

- DC/DC converters
- Power supplies
- General use

PM1210 & PM1812 Series SMT Chip Inductors

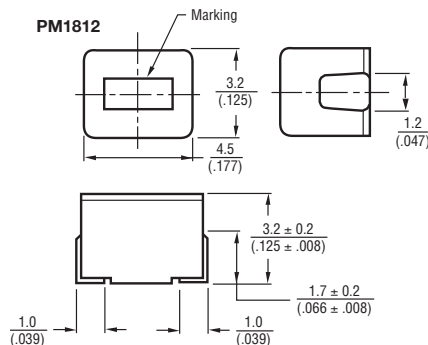
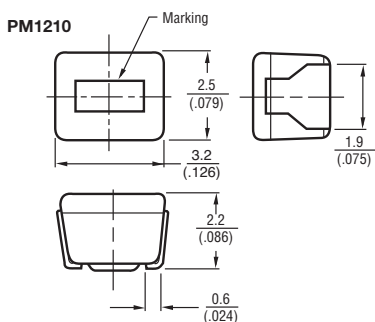
General Specifications

Temperature Rise	20 °C max.
Ambient Temperature	80 °C max.
Operating Temperature.....	-40 °C to +100 °C
Storage Temperature.....	-40 °C to +100 °C
Resistance to Soldering Heat	
PM1210.....	260 °C, 5 seconds
PM1812.....	245 °C, 5 seconds

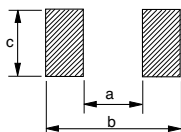
Materials

Ferrite Core	
PM1210.....	All
PM1812.....	All
Coil Type.....	Copper wire
Enclosure.....	Epoxy resin
Terminal	Sn

Product Dimensions



Recommended Land Pattern Dimensions



Model	a	b	c
PM1210	1.6 to 2.0 (.063 to .079)	4.0 to 4.6 (.157 to .181)	1.9 to 2.4 (.075 to .094)
PM1812	2.4 to 2.6 (.094 to .102)	5.5 to 6.0 (.217 to .236)	2.0 to 3.0 (.079 to .118)

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

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

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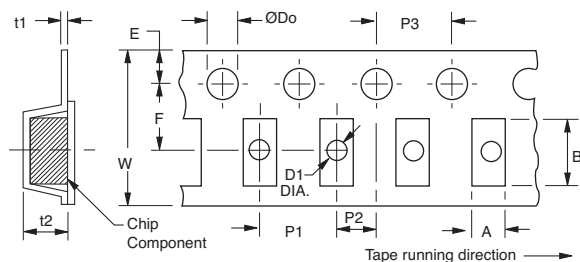
Users should verify actual device performance in their specific applications.

PM1210 & PM1812 Series SMT Chip Inductors

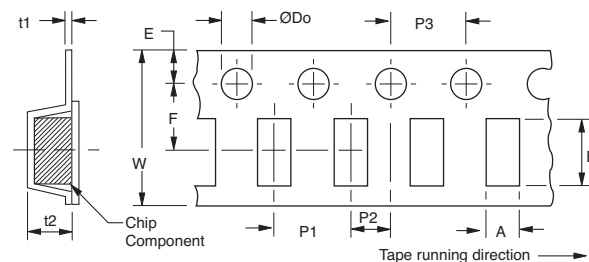
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Packaging Specifications

PM1210 Series



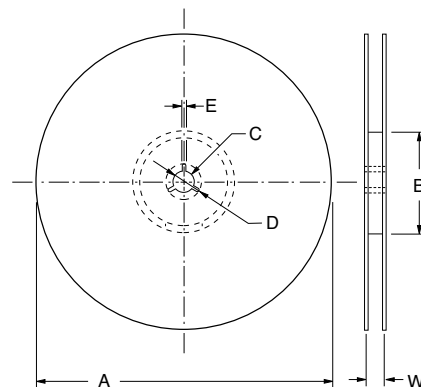
PM1812 Series



Model	A	B	W	F	E	P1	P2	P3	ØD0	ØD1	t1	t2
PM1210	2.80 (.110)	3.60 (.142)	8.00 (.315)	3.50 (.138)	1.75 (.069)	4.00 (.157)	2.00 (.079)	4.00 (.157)	1.50 (.059)	—	0.25 (.010)	2.40 (.094)
PM1812	3.60 (.142)	4.90 (.193)	12.00 (.472)	5.50 (.217)	1.75 (.069)	8.00 (.315)	2.00 (.079)	4.00 (.157)	1.50 (.059)	—	0.30 (.012)	3.50 (.138)

Reel Dimensions

Model	A	B	C	D	E	W
PM1210	178 (7.008)	60 min.	13 (.512)	21 (.827)	2 (.079)	9 (.354)
PM1812	178 (7.008)	60 min.	13 (.512)	21 (.827)	2 (.079)	13 (.512)



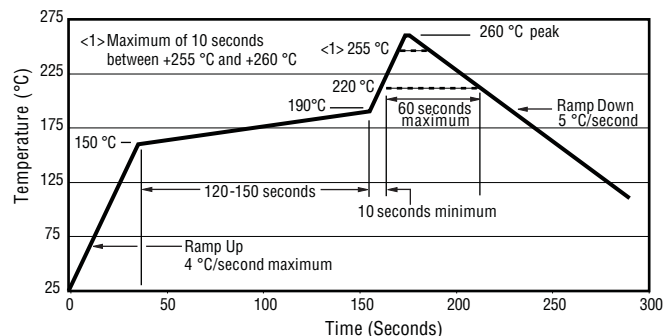
Packaging

Model	Quantity	Weight
PM1210	2000 pcs.	190 g
PM1812	500 pcs.	100 g

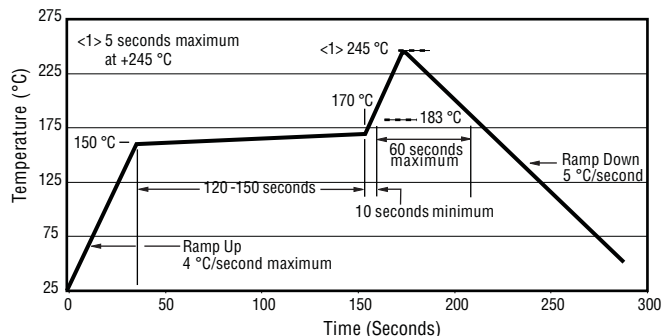
DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

Soldering Profiles

PM1210 Series



PM1812 Series



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PM1210 & PM1812 Series SMT Chip Inductors

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PM1210 Series

RoHS Compliant 1210 Size Part Number	Inductance μ H	Tolerance	Q min.	Test Frequency MHz	SRF min. MHz	RDC ohms max.	IDC mA max.
PM1210-1R0J-RC	1.0	$\pm 5\%$	30	7.96	115	0.69	230
PM1210-1R2J-RC	1.2	$\pm 5\%$	30	7.96	100	0.75	215
PM1210-1R5J-RC	1.5	$\pm 5\%$	30	7.96	90	0.75	210
PM1210-1R8J-RC	1.8	$\pm 5\%$	30	7.96	85	0.82	200
PM1210-2R2J-RC	2.2	$\pm 5\%$	30	7.96	80	0.95	190
PM1210-2R7J-RC	2.7	$\pm 5\%$	30	7.96	75	1.1	180
PM1210-3R3J-RC	3.3	$\pm 5\%$	30	7.96	65	1.2	180
PM1210-3R9J-RC	3.9	$\pm 5\%$	30	7.96	60	1.3	175
PM1210-4R7J-RC	4.7	$\pm 5\%$	30	7.96	55	1.5	165
PM1210-5R6J-RC	5.6	$\pm 5\%$	30	7.96	50	1.6	160
PM1210-6R8J-RC	6.8	$\pm 5\%$	30	7.96	45	1.8	150
PM1210-8R2J-RC	8.2	$\pm 5\%$	30	7.96	40	2.0	140
PM1210-100J-RC	10	$\pm 5\%$	30	2.52	36	2.1	140
PM1210-120J-RC	12	$\pm 5\%$	30	2.52	33	2.5	125
PM1210-150J-RC	15	$\pm 5\%$	30	2.52	30	2.8	120
PM1210-180J-RC	18	$\pm 5\%$	30	2.52	27	3.3	110
PM1210-220J-RC	22	$\pm 5\%$	30	2.52	25	3.7	105
PM1210-270J-RC	27	$\pm 5\%$	30	2.52	22	5.0	90
PM1210-330J-RC	33	$\pm 5\%$	30	2.52	20	5.6	85
PM1210-390J-RC	39	$\pm 5\%$	30	2.52	20	6.4	80
PM1210-470J-RC	47	$\pm 5\%$	30	2.52	15	7.0	75
PM1210-560J-RC	56	$\pm 5\%$	30	2.52	15	8.0	70
PM1210-680J-RC	68	$\pm 5\%$	30	2.52	15	9.0	65
PM1210-820J-RC	82	$\pm 5\%$	30	2.52	11	10	60
PM1210-101J-RC	100	$\pm 5\%$	20	0.796	10	10	60
PM1210-121J-RC	120	$\pm 5\%$	20	0.796	10	11	55
PM1210-151J-RC	150	$\pm 5\%$	20	0.796	8	15	50
PM1210-181J-RC	180	$\pm 5\%$	20	0.796	7	17	50
PM1210-221J-RC	220	$\pm 5\%$	20	0.796	7	21	45



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PM1210 & PM1812 Series SMT Chip Inductors

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PM1812 Series

RoHS Compliant 1812 Size Part Number	Inductance μ H	Tolerance	Q min.	Test Freq. MHz	SRF min. MHz	RDC ohms max.	IDC mA max.
PM1812-R10K-RC	0.10	±10 %	35	25.2	300	0.18	800
PM1812-R12K-RC	0.12	±10 %	35	25.2	280	0.2	770
PM1812-R15K-RC	0.15	±10 %	35	25.2	250	0.22	730
PM1812-R18K-RC	0.18	±10 %	35	25.2	220	0.24	700
PM1812-R22K-RC	0.22	±10 %	40	25.2	200	0.25	665
PM1812-R27K-RC	0.27	±10 %	40	25.2	180	0.26	635
PM1812-R33K-RC	0.33	±10 %	40	25.2	165	0.28	605
PM1812-R39K-RC	0.39	±10 %	40	25.2	150	0.30	575
PM1812-R47K-RC	0.47	±10 %	40	25.2	145	0.32	545
PM1812-R56K-RC	0.56	±10 %	40	25.2	140	0.36	520
PM1812-R68K-RC	0.68	±10 %	40	25.2	135	0.40	500
PM1812-R82K-RC	0.82	±10 %	40	25.2	130	0.45	475
PM1812-1R0J-RC	1.0	±5 %	50	7.96	100	0.50	450
PM1812-1R2J-RC	1.2	±5 %	50	7.96	80	0.55	430
PM1812-1R5J-RC	1.5	±5 %	50	7.96	70	0.60	410
PM1812-1R8J-RC	1.8	±5 %	50	7.96	60	0.65	390
PM1812-2R2J-RC	2.2	±5 %	50	7.96	55	0.70	380
PM1812-2R7J-RC	2.7	±5 %	50	7.96	50	0.75	370
PM1812-3R3J-RC	3.3	±5 %	50	7.96	45	0.80	355
PM1812-3R9J-RC	3.9	±5 %	50	7.96	40	0.90	330
PM1812-4R7J-RC	4.7	±5 %	50	7.96	35	1.00	315
PM1812-5R6J-RC	5.6	±5 %	50	7.96	33	1.10	300
PM1812-6R8J-RC	6.8	±5 %	50	7.96	27	1.2	285
PM1812-8R2J-RC	8.2	±5 %	50	7.96	25	1.4	270
PM1812-100J-RC	10	±5 %	50	2.52	20	1.6	250
PM1812-120J-RC	12	±5 %	50	2.52	18	2	225
PM1812-150J-RC	15	±5 %	50	2.52	17	2.5	200
PM1812-180J-RC	18	±5 %	50	2.52	15	2.8	190
PM1812-220J-RC	22	±5 %	50	2.52	13	3.2	180
PM1812-270J-RC	27	±5 %	50	2.52	12	3.6	170
PM1812-330J-RC	33	±5 %	50	2.52	11	4	160
PM1812-390J-RC	39	±5 %	50	2.52	10	4.5	150
PM1812-470J-RC	47	±5 %	50	2.52	10	5	140
PM1812-560J-RC	56	±5 %	50	2.52	9	5.5	135
PM1812-680J-RC	68	±5 %	50	2.52	9	6	130
PM1812-820J-RC	82	±5 %	50	2.52	8	7	120
PM1812-101J-RC	100	±5 %	40	2.52	8	8	110
PM1812-121J-RC	120	±5 %	40	0.796	6	8	110
PM1812-151J-RC	150	±5 %	40	0.796	5	9	105
PM1812-181J-RC	180	±5 %	40	0.796	5	9.5	102
PM1812-221J-RC	220	±5 %	40	0.796	4	10	100
PM1812-271J-RC	270	±5 %	40	0.796	4	12	92
PM1812-331J-RC	330	±5 %	40	0.796	3.5	14	85
PM1812-391J-RC	390	±5 %	40	0.796	3	18	80
PM1812-471J-RC	470	±5 %	40	0.796	3	26	62
PM1812-561J-RC	560	±5 %	30	0.796	3	30	50
PM1812-681J-RC	680	±5 %	30	0.796	3	30	50
PM1812-821J-RC	820	±5 %	30	0.796	2.5	35	30
PM1812-102J-RC	1000	±5 %	30	0.252	2.5	40	30

REV. 04/14

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