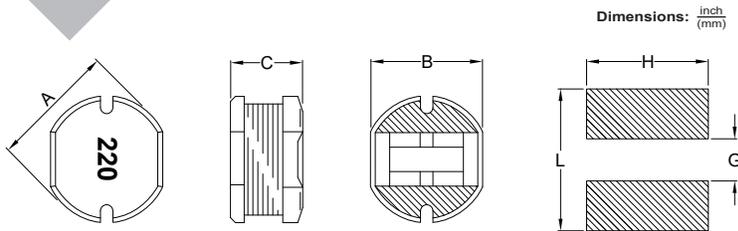




SMD Power Choke

PC0504BM



Dimensions: ^{inch}
(_{mm})

A	B	C	L	G	H
.228±.012 (5.8±0.3)	.205±.012 (5.2±0.3)	.177±.012 (4.5±0.3)	.236 (6.0)	.067 (1.7)	.217 (5.5)

Recommended
PCB Layout



Allied Part Number	Inductance (µH)	Tolerance (±%)	Test Frequency MHz, 1.0V	DCR (Ω) Max	IDC (A) Max
PC0504BM-R47N-RC	0.47	30	7.96	.010	7.0
PC0504BM-1R0M-RC	1.0	20	7.96	.018	3.5
PC0504BM-1R2M-RC	1.2	20	7.96	.019	3.5
PC0504BM-1R4M-RC	1.4	20	7.96	.020	3.5
PC0504BM-1R5M-RC	1.5	20	7.96	.025	3.5
PC0504BM-1R8M-RC	1.8	20	7.96	.025	3.0
PC0504BM-2R2M-RC	2.2	20	7.96	.030	2.8
PC0504BM-2R7M-RC	2.7	20	7.96	.035	2.6
PC0504BM-3R3M-RC	3.3	20	7.96	.040	2.5
PC0504BM-3R6M-RC	3.6	20	7.96	.045	2.4
PC0504BM-3R9M-RC	3.9	20	7.96	.050	2.3
PC0504BM-4R7M-RC	4.7	20	7.96	.060	2.6
PC0504BM-5R6M-RC	5.6	20	7.96	.070	2.4
PC0504BM-6R8M-RC	6.8	20	7.96	.080	2.2
PC0504BM-8R2M-RC	8.2	20	7.96	.080	2.0
PC0504BM-100M-RC	10.0	20	2.52	.090	1.8
PC0504BM-120M-RC	12.0	20	2.52	0.10	1.6
PC0504BM-150M-RC	15.0	20	2.52	0.12	1.5
PC0504BM-180M-RC	18.0	20	2.52	0.15	1.4
PC0504BM-220M-RC	22.0	20	2.52	0.18	1.3
PC0504BM-270M-RC	27.0	20	2.52	0.22	1.2
PC0504BM-330M-RC	33.0	20	2.52	0.26	1.0
PC0504BM-390M-RC	39.0	20	2.52	0.30	.90
PC0504BM-470M-RC	47.0	20	2.52	0.35	.85
PC0504BM-560M-RC	56.0	20	2.52	0.40	.80
PC0504BM-680M-RC	68.0	20	2.52	0.45	.70
PC0504BM-820M-RC	82.0	20	2.52	0.50	.70
PC0504BM-101M-RC	100	20	1.0KHz	0.70	.60
PC0504BM-121M-RC	120	20	1.0KHz	0.75	.60
PC0504BM-151 *-RC	150	10,20	1.0KHz	0.90	.55
PC0504BM-181M-RC	180	20	1.0KHz	1.10	.50
PC0504BM-221M-RC	220	20	1.0KHz	1.20	.40
PC0504BM-271M-RC	270	20	1.0KHz	1.50	.25
PC0504BM-331M-RC	330	20	1.0KHz	3.00	.22
PC0504BM-391M-RC	390	20	1.0KHz	3.50	.20
PC0504BM-471M-RC	470	20	1.0KHz	4.00	.19
PC0504BM-561M-RC	560	20	1.0KHz	4.00	.18
PC0504BM-681M-RC	680	20	1.0KHz	4.50	.15

*Insert tolerance designator: K=10%, M=20%
All specifications subject to change without notice.

Features

- Expanded operating temp range
- MSL Level 1
- Suitable for pick and place
- Pb and Halogen Free
- RoHS Compliant

Electrical

Inductance Range: 0.47µH-680µH
Tolerance: ±10%-30%
Test Frequencies: 0.47-8.2µH 7.96MHz, 1V
 10-82µH 2.52MHz, 1V
 100-680µH 1KHz, 1V
Operating Temp: -40°C to +125°C
Irms: Current at which ΔT=40°C temp rise without core loss.
Isat: Current at which Inductance drop is approximately 30%. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.

Solderability

Pre-Heat: 150°C, 60Sec
Solder Composition: Sn96.5%/Ag3%/Cu0.5%
Solder Temp: 245°C ±5°C
Flux for lead free: Rosin 9.5%
Immersion Time: 4 ±1 Sec
Depth: Completely cover terminations

Test Equipment

(L): HP4284A, CH11025, CH1320, CS1320S
 LCR meter or equivalent
DCR: CH16502, Agilent 33420A Mirco-Ohmmeter

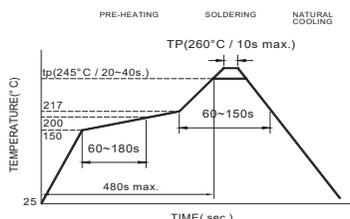
Physical

Packaging: 1500 pieces per 13 inch reel
Marking: EIA Inductance Code/ Date Code

Schematic



Reflow Soldering

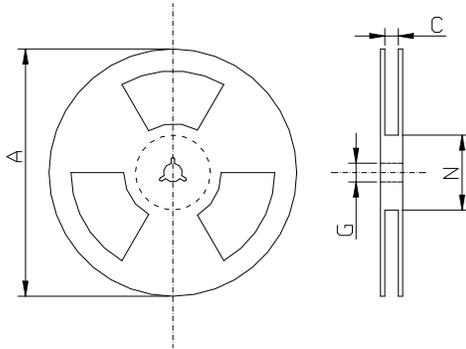


Reflow times: 3 times max.



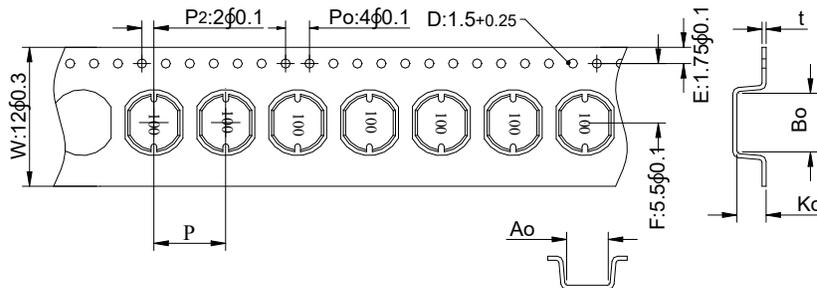
Packaging Information

1. Reel Dimension



Style	A(mm)	C(mm)	G(mm)	N(mm)
13"X12mm	330	14 ⁺⁰	13.5±0.5	50 ⁻⁰

2. Tape Dimension / 12mm



W(mm)	P(mm)	D(mm)
12±0.3	8±0.1	1.5±0.25

Application Notice

▮ Storage Conditions

To maintain the solderability of terminal electrodes:

1. PC0504BM products meet IPC/JEDEC J-STD-020D standard-MSL, level 1.
2. Temperature and humidity conditions: Less than 40°C and 60% RH.
3. Recommended products should be used within 12 months from the time of delivery.
4. The packaging material should be kept where no chlorine or sulfur exists in the air.

▮ Transportation

1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
3. Bulk handling should ensure that abrasion and mechanical shock are minimized.