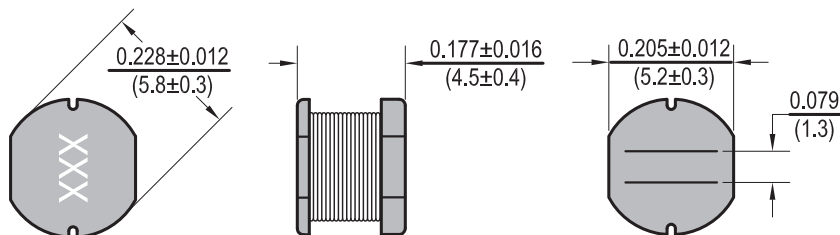


# PC0504 Power Chip Inductors



Dimensions:  $\frac{\text{Inches}}{\text{(mm)}}$



## Features

- Unshielded SMD low cost design
- Designed for high current applications
- Accurate and consistent dimensions for auto insertion
- Excellent for use in DC-DC converter application
- High saturation for surface mounting

## Electrical

**Inductance Range:** 2.2 $\mu$ h to 1000 $\mu$ h

**Tolerance:** 20% over entire range

Also available in tighter tolerances

**Test Frequency:** (L) as specified

**Operating Temp:** -55°C ~ +125°C

**IDC:** Current at which Inductance drops 10% of original value with a  $\Delta T = 40$  C whichever is lower.

## Resistance to Soldering Heat

**Test Method:** Pre-Heat 150°C, 1 Min.

**Solder Composition:** Sn/Ag3.0/Cu0.5

**Solder Temp:** 260°C +/- 5°C for 10 sec  $\pm$  1 sec.

## Test Equipment

**(L):** HP4192A Impedence Analyzer

**(DCR):** Chen Hwa 502BC

**(IDC):** HP4284A with HP42841A or CH1061 with CH301A

| Allied Part Number | Inductance ( $\mu$ h) | Tolerance (%) | Test Freq. (MHz) 1V | RDC $\Omega$ Max. | IDC ( ) |
|--------------------|-----------------------|---------------|---------------------|-------------------|---------|
| PC0504-2R2M-RC     | 2.2                   | 20            | 7.96                | 0.023             | 3.20    |
| PC0504-3R3M-RC     | 3.3                   | 20            | 7.96                | .0314             | 2.59    |
| PC0504-4R7M-RC     | 4.7                   | 20            | 7.96                | .0372             | 2.30    |
| PC0504-8R2M-RC     | 8.2                   | 20            | 7.96                | .0594             | 1.70    |
| PC0504-100M-RC     | 10                    | 20            | 2.52                | 0.100             | 1.44    |
| PC0504-120M-RC     | 12                    | 20            | 2.52                | 0.120             | 1.40    |
| PC0504-150M-RC     | 15                    | 20            | 2.52                | 0.140             | 1.30    |
| PC0504-180M-RC     | 18                    | 20            | 2.52                | 0.150             | 1.23    |
| PC0504-220M-RC     | 22                    | 20            | 2.52                | 0.180             | 1.11    |
| PC0504-270M-RC     | 27                    | 20            | 2.52                | 0.200             | 0.97    |
| PC0504-330M-RC     | 33                    | 20            | 2.52                | 0.230             | 0.88    |
| PC0504-390M-RC     | 39                    | 20            | 2.52                | 0.320             | 0.80    |
| PC0504-470M-RC     | 47                    | 20            | 2.52                | 0.370             | 0.72    |
| PC0504-560M-RC     | 56                    | 20            | 2.52                | 0.420             | 0.68    |
| PC0504-680M-RC     | 68                    | 20            | 2.52                | 0.460             | 0.61    |
| PC0504-820M-RC     | 82                    | 20            | 2.52                | 0.600             | 0.58    |
| PC0504-101M-RC     | 100                   | 20            | 1                   | 0.700             | 0.52    |
| PC0504-121M-RC     | 120                   | 20            | 1                   | 0.930             | 0.48    |
| PC0504-151M-RC     | 150                   | 20            | 1                   | 1.100             | 0.40    |
| PC0504-181M-RC     | 180                   | 20            | 1                   | 1.380             | 0.38    |
| PC0504-221M-RC     | 220                   | 20            | 1                   | 1.570             | 0.35    |
| PC0504-271M-RC     | 270                   | 20            | 1                   | 1.850             | 0.29    |
| PC0504-331M-RC     | 330                   | 20            | 1                   | 2.000             | 0.28    |
| PC0504-391M-RC     | 390                   | 20            | 1                   | 2.600             | 0.26    |
| PC0504-471M-RC     | 470                   | 20            | 1                   | 3.000             | 0.12    |
| PC0504-561M-RC     | 560                   | 20            | 1                   | 4.190             | 0.10    |
| PC0504-681M-RC     | 680                   | 20            | 1                   | 4.440             | 0.08    |
| PC0504-821M-RC     | 820                   | 20            | 1                   | 5.120             | 0.05    |
| PC0504-102M-RC     | 1000                  | 20            | 1                   | 10.00             | 0.03    |

All specifications subject to change without notice.

www.DataSheet4U.com **Physical**

**Packaging:** 1500 pieces per 13 inch reel.

**Marking:** EIA Inductance Code.