

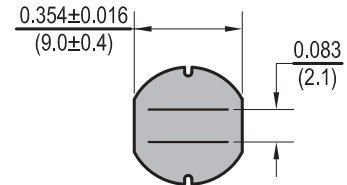
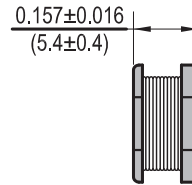
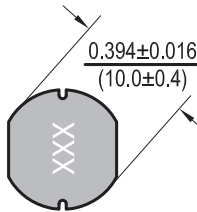


## Power Chip Inductors

## PC1005



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



| Allied Part Number | Inductance (μh) | Tolerance (%) | Test Freq. | DCR Max. (Ω) | IDC Max. (A) |
|--------------------|-----------------|---------------|------------|--------------|--------------|
| PC1005-3R3M-RC     | 3.3             | 20            | 2.52MHz,1V | .038         | 2.80         |
| PC1005-4R7M-RC     | 4.7             | 20            | 2.52MHz,1V | 0.04         | 2.60         |
| PC1005-6R8M-RC     | 6.8             | 20            | 2.52MHz,1V | .037         | 4.33         |
| PC1005-100M-RC     | 10              | 20            | 2.52MHz,1V | 0.06         | 2.60         |
| PC1005-120M-RC     | 12              | 20            | 2.52MHz,1V | 0.07         | 2.45         |
| PC1005-150M-RC     | 15              | 20            | 2.52MHz,1V | 0.08         | 2.27         |
| PC1005-180K-RC     | 18              | 10            | 2.52MHz,1V | 0.09         | 2.15         |
| PC1005-220K-RC     | 22              | 10            | 2.52MHz,1V | 0.10         | 1.95         |
| PC1005-270K-RC     | 27              | 10            | 2.52MHz,1V | 0.11         | 1.76         |
| PC1005-330K-RC     | 33              | 10            | 2.52MHz,1V | 0.12         | 1.50         |
| PC1005-390K-RC     | 39              | 10            | 2.52MHz,1V | 0.14         | 1.37         |
| PC1005-470K-RC     | 47              | 10            | 2.52MHz,1V | 0.17         | 1.28         |
| PC1005-560K-RC     | 56              | 10            | 2.52MHz,1V | 0.19         | 1.17         |
| PC1005-680K-RC     | 68              | 10            | 2.52MHz,1V | 0.22         | 1.11         |
| PC1005-820K-RC     | 82              | 10            | 2.52MHz,1V | 0.25         | 1.10         |
| PC1005-101K-RC     | 100             | 10            | 1KHz,1V    | 0.35         | 0.97         |
| PC1005-121K-RC     | 120             | 10            | 1KHz,1V    | 0.40         | 0.89         |
| PC1005-151K-RC     | 150             | 10            | 1KHz,1V    | 0.47         | 0.78         |
| PC1005-181K-RC     | 180             | 10            | 1KHz,1V    | 0.63         | 0.72         |
| PC1005-221K-RC     | 220             | 10            | 1KHz,1V    | 0.73         | 0.66         |
| PC1005-271K-RC     | 270             | 10            | 1KHz,1V    | 0.97         | 0.57         |
| PC1005-331K-RC     | 330             | 10            | 1KHz,1V    | 1.15         | 0.52         |
| PC1005-390K-RC     | 390             | 10            | 1KHz,1V    | 1.30         | 0.48         |
| PC1005-470K-RC     | 470             | 10            | 1KHz,1V    | 1.48         | 0.42         |
| PC1005-560K-RC     | 560             | 10            | 1KHz,1V    | 1.90         | 0.33         |
| PC1005-680K-RC     | 680             | 10            | 1KHz,1V    | 2.25         | 0.28         |
| PC1005-820K-RC     | 820             | 10            | 1KHz,1V    | 2.55         | 0.24         |

All specifications subject to change without notice.

### Features

- Unshielded SMD Power Inductor
- Suitable for pick and place assembly
- Suitable for large currents
- Ideal for DC-DC converter applications

### Electrical

**Inductance Range:** 3.3μh to 820μh

**Tolerance:** 20% over entire range

Also available in tighter tolerances

**Test Frequency:** As noted

**Operating Temp:** -40°C ~ +85°C

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

### Resistance to Soldering Heat

Pre-Heat 150°C, 1 Min.

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

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

### Test Equipment

**(L):** HP4192A LF Impedance Analyzer

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

**(IDC):** HP4284A with HP42841A or Chen Hwa 1061 + 301A

### Physical

**Packaging:** 700 pieces per 13 inch reel.

**Marking:** EIA Inductance Code.