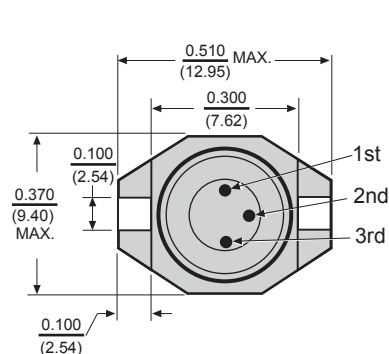
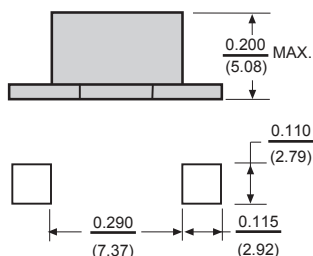


# PCIS40 Power Chip Shielded Inductors



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



## Features

- Small size for high mounting density.
- Magnetically Shielded
- Minimum power loss can help increase battery life.
- High energy storage and very low DCR.
- Designed with high heat resistant materials for reflow operation.
- Flat top for pick and place assembly.

## Electrical

**Inductance Range:** 1.0 $\mu$ h to 47 $\mu$ h.

**Tolerance:**  $\pm 20\%$  over the entire inductance range.

**Test Frequency:** Inductance and Q measured at 100KHz, 0.1Vrms.

**Operating Temp. Range:**  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$

**Inductance Drop:** 10% typical at rated Isat.

**Temperature Rise:**  $\Delta T = 40^{\circ}\text{C}$  rise typical at Irms.

## Physical

**Marking:** Color Code using standard EIA three dot system.

**Packaging:** 1000 pieces per 13 inch reel.

| Allied Part Number | Inductance ( $\mu$ h) | Q Min. | Q Test Frequency (KHz) | DCR Max. ( $\Omega$ ) | SRF Reference (MHz) | Isat (A) | Irms (A) |
|--------------------|-----------------------|--------|------------------------|-----------------------|---------------------|----------|----------|
| PCIS40-1R0M-RC     | 1.0                   | 3      | 100                    | .021                  | 110                 | 5.6      | 5.0      |
| PCIS40-1R5M-RC     | 1.5                   | 5      | 100                    | .022                  | 90                  | 5.2      | 4.5      |
| PCIS40-2R2M-RC     | 2.2                   | 5      | 100                    | .032                  | 60                  | 5.0      | 3.8      |
| PCIS40-3R3M-RC     | 3.3                   | 5      | 100                    | .039                  | 55                  | 3.9      | 3.3      |
| PCIS40-4R7M-RC     | 4.7                   | 10     | 100                    | .054                  | 30                  | 3.2      | 2.7      |
| PCIS40-6R8M-RC     | 6.8                   | 10     | 100                    | .075                  | 30                  | 2.8      | 2.2      |
| PCIS40-100M-RC     | 10                    | 10     | 100                    | .101                  | 28                  | 2.4      | 2.0      |
| PCIS40-150M-RC     | 15                    | 15     | 100                    | .150                  | 20                  | 2.0      | 1.5      |
| PCIS40-220M-RC     | 22                    | 20     | 100                    | .207                  | 15                  | 1.6      | 1.3      |
| PCIS40-330M-RC     | 33                    | 20     | 100                    | .334                  | 12                  | 1.4      | 1.1      |
| PCIS40-470M-RC     | 47                    | 20     | 100                    | .472                  | 10                  | 1.0      | 0.8      |

All specifications subject to change without notice.