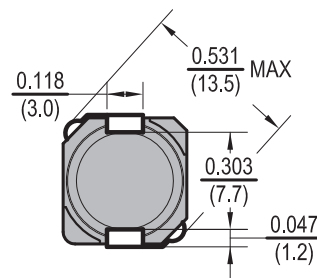
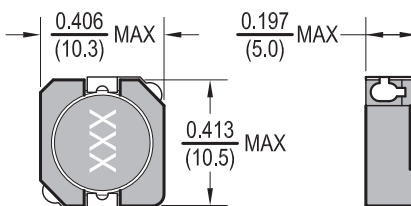




# Power Chip Shielded Inductors PCS105



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



Allied Part Number	Inductance ( $\mu\text{H}$ )	Tolerance (%)	Test Frequency KHz, 1V	DCR Max. ( $\Omega$ )	IDC (A)
PCS105-R80T-RC	0.8	30	100	0.0043	13.50
PCS105-1R5T-RC	1.5	30	100	0.0058	10.50
PCS105-2R2T-RC	2.2	30	100	0.0072	9.25
PCS105-3R3T-RC	3.3	30	100	0.0104	7.80
PCS105-4R7T-RC	4.7	30	100	0.0123	6.40
PCS105-6R8T-RC	6.8	30	100	0.0180	5.40
PCS105-8R2T-RC	8.2	30	100	0.0200	4.85
PCS105-100T-RC	10	30	100	0.0260	4.45
PCS105-120T-RC	12	30	100	0.0330	4.00
PCS105-150T-RC	15	30	100	0.0410	3.60
PCS105-180T-RC	18	30	100	0.0460	3.20
PCS105-220T-RC	22	30	100	0.0610	2.95
PCS105-270T-RC	27	30	100	0.0690	2.70
PCS105-330T-RC	33	30	100	0.0840	2.50
PCS105-390T-RC	39	30	100	0.1060	2.30
PCS105-470T-RC	47	30	100	0.1300	2.00
PCS105-560T-RC	56	30	100	0.1490	1.90
PCS105-680T-RC	68	30	100	0.2010	1.65
PCS105-820T-RC	82	30	100	0.2270	1.50
PCS105-101T-RC	100	30	100	0.2530	1.35
PCS105-121T-RC	120	30	100	0.3030	1.28
PCS105-151T-RC	150	30	100	0.3700	1.12
PCS105-181T-RC	180	30	100	0.4190	1.04
PCS105-221T-RC	220	30	100	0.5000	0.94
PCS105-271T-RC	270	30	100	0.6720	0.84
PCS105-331T-RC	330	30	100	0.8120	0.75
PCS105-391T-RC	390	30	100	0.9530	0.70
PCS105-471T-RC	470	30	100	1.290	0.60
PCS105-561T-RC	560	30	100	1.430	0.54
PCS105-681T-RC	680	30	100	1.600	0.52
PCS105-821T-RC	820	30	100	1.770	0.50
PCS105-102T-RC	1000	30	100	1.990	0.48

All specifications subject to change without notice.

## Features

- Shielded SMD Power Inductor
- Available in magnetically shielded
- Low DC resistance
- Ideal for DC-DC converter applications

## Electrical

**Inductance Range:** 0.8 $\mu\text{H}$  to 1000 $\mu\text{H}$

**Tolerance:** 30% over entire range

Also available in tighter tolerances  
M = 20%, T = 30%

**Operating Temp:** -55°C to +125°C

**IDC:** Current at which inductance drop = 35% typ.

## Resistance to Soldering Heat

Pre-Heat 150°C, 1 minute.

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

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

## Test Equipment

(L): HP 4192A LF Impedance Analyzer

(RDC): Chen Hwa 502

(IDC): HP4284A + HP42841A

## Physical

**Packaging:** 500 pieces per 13 inch reel.

**Marking:** EIA Inductance Code

## Option

Insert "A" after tolerance indicator for added epoxy in the assembly process. This has been proven to further eliminate noise due vibration in certain applications.

**Example:** PCS105-XXXT-A-RC