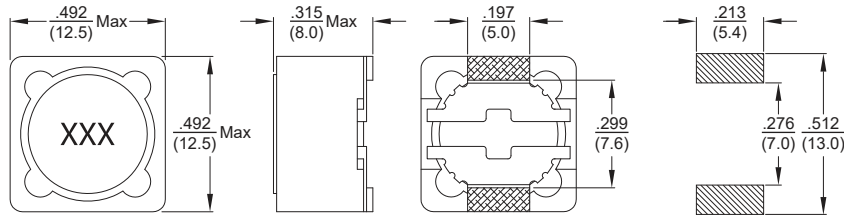




## Power Inductor

## PCSAU127

Dimensions:  $\frac{\text{inch}}{\text{mm}}$ Recommended  
PCB Layout

Allied Part Number	Inductance ( $\mu\text{H}$ )	Tolerance ( $\pm\%$ )	Test Freq. KHz, 1.0V	DCR Max ( $\Omega$ )	Isat (A) Typ	Isat (A) Max
PCSAU127-3R5N-RC	3.5	30	100	.0123	17.4	13.8
PCSAU127-4R7N-RC	4.7	30	100	.0158	15.4	12.3
PCSAU127-6R1N-RC	6.1	30	100	.0176	13.8	10.9
PCSAU127-6R8N-RC	6.8	30	100	.0180	13.7	10.8
PCSAU127-7R6N-RC	7.6	30	100	.0200	12.6	10.0
PCSAU127-100M-RC	10	20	1	.0220	11.2	8.9
PCSAU127-120M-RC	12	20	1	.0300	9.4	7.4
PCSAU127-150M-RC	15	20	1	.0340	9.0	7.1
PCSAU127-180M-RC	18	20	1	.0392	8.2	6.5
PCSAU127-220M-RC	22	20	1	.0480	7.5	5.8
PCSAU127-270M-RC	27	20	1	.0520	6.7	5.3
PCSAU127-330M-RC	33	20	1	.0648	6.1	4.8
PCSAU127-390M-RC	39	20	1	.0650	5.6	3.9
PCSAU127-470M-RC	47	20	1	0.100	5.2	3.6
PCSAU127-560M-RC	56	20	1	0.110	4.8	3.4
PCSAU127-680M-RC	68	20	1	0.120	4.1	2.8
PCSAU127-820M-RC	82	20	1	0.160	4.0	2.7
PCSAU127-101M-RC	100	20	1	0.170	3.5	2.5
PCSAU127-121M-RC	120	20	1	0.190	3.2	2.2
PCSAU127-151M-RC	150	20	1	0.250	2.9	2.0
PCSAU127-181M-RC	180	20	1	0.310	2.6	1.8
PCSAU127-221M-RC	220	20	1	0.350	2.4	1.7
PCSAU127-271M-RC	270	20	1	0.430	2.2	1.5
PCSAU127-331M-RC	330	20	1	0.510	2.0	1.2
PCSAU127-391M-RC	390	20	1	0.600	1.6	1.1
PCSAU127-471M-RC	470	20	1	0.710	1.6	0.99
PCSAU127-561M-RC	560	20	1	0.880	1.4	0.95
PCSAU127-681M-RC	680	20	1	1.040	1.2	0.84
PCSAU127-821M-RC	820	20	1	1.360	1.1	0.77
PCSAU127-102M-RC	1000	20	1	1.660	1.0	0.73

All specifications subject to change without notice.

Features

- Tested in compliance with AEC-Q200
- Magnetically shielded
- High saturation current
- Expanded operating temp range
- Low DC Resistance
- High Energy Storage
- Low Energy Loss
- Suitable for pick and place

Electrical**Inductance Range:** 3.5 $\mu\text{H}$  to 1000 $\mu\text{H}$ **Tolerance:**  $\pm 20\%$  and  $30\%$ **Test Frequency:** 100KHz (3R5-7R6)  
1KHz (100-102)**Operating Temp:**  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ **Isat:** Is the current at which inductance drop 35% (typ) from the initial valueResistance to Soldering Heat**Pre-Heat:**  $150^{\circ}\text{C}$ , 1 minute**Solder Composition:** Sn/Ag3.0/Cu0.5**Solder Temp:**  $250^{\circ}\text{C} \pm 5^{\circ}\text{C}$ **Immersion time:**  $10^{\circ}\text{C} \pm 1$  sec.Test Equipment**(L):** E4980 or HP4284A**DCR:** Chroma 16502**Isat:** HP4284A + HP42841A or  
WK3260B + WK3265BPhysical**Packaging:** 500 pieces per 13 inch reel**Marking:** EIA Inductance Code