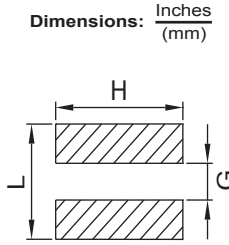
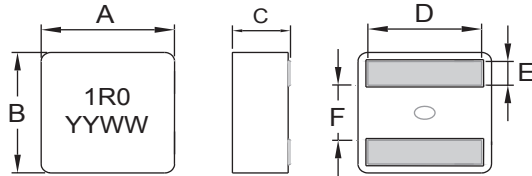




# Shielded High Current Power Choke

# PCXA402

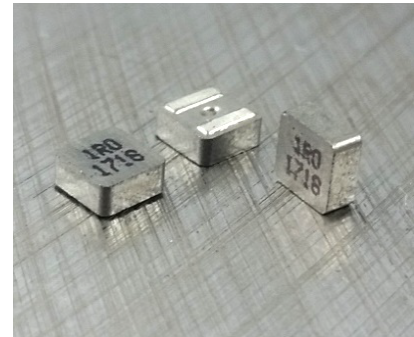


Dimensions: Inches (mm)

A	B	C	D	E	F
.161±.008 (4.1±0.2)	.161±.008 (4.1±0.2)	.075±.008 (1.9±0.2)	.134±.012 (3.4±0.3)	.035±.008 (0.88±0.2)	.063±.010 (1.6±0.25)

Recommend PCB Layout

L	G	H
.134 (3.4) Ref	.055 (1.4) Ref	.150 (3.8) Ref



Allied Part Number	Inductance (μH) ±20% @ 0A	DCR (mΩ) Typ.@25°C	DCR (mΩ) Max@25°C	Irms (A) Typ.		Isat (A)	
				20°C Rise	40°C Rise	Typ	Max
PCXA402-R10M	0.10	2.20	2.42	13.5	18.0	38.0	33.0
PCXA402-R22M	0.22	4.10	4.60	13.0	16.8	19.5	18.8
PCXA402-R36M	0.36	5.60	6.30	11.0	14.5	17.0	15.0
PCXA402-R40M	0.40	6.90	7.73	10.0	14.0	15.5	13.5
PCXA402-R56M	0.56	8.40	9.30	8.5	12.0	14.0	12.6
PCXA402-R60M	0.60	8.60	9.52	8.0	11.7	13.7	12.3
PCXA402-R72M	0.72	10.4	11.6	7.6	10.5	12.0	10.6
PCXA402-1R0M	1.00	13.3	14.6	6.8	9.6	9.6	8.8
PCXA402-1R2M	1.20	16.2	17.9	6.6	9.0	9.0	7.8
PCXA402-1R5M	1.50	21.0	23.5	5.8	7.6	8.0	7.4
PCXA402-1R8M	1.80	25.0	28.0	5.2	7.0	7.5	7.0
PCXA402-2R2M	2.20	35.2	38.7	4.6	5.6	6.5	6.0

### Features

- High Operating Temperature Range
- High Efficiency
- High Current with Soft Saturation
- Low DCR
- Suitable for pick and place
- Very low acoustic noise and very low leakage flux noise.

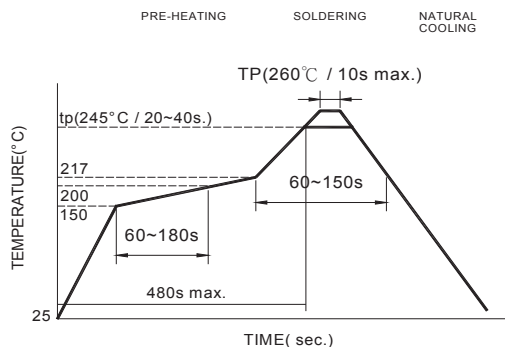
### Electrical

**Inductance Range:** 0.10μH to 2.2μH  
**Tolerance:** ±20% Across entire series  
**Test Frequency:** 100KHz, 0.1V  
**Operating Temp:** -40°C to +125°C  
**MSL:** Level 1  
**Irms:** Current at which ΔT=20°C & ΔT=40°C temp rise without core loss.  
**Isat:** Current at which Inductance drop is approximately 30%. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.

### Resistance to Soldering Heat

**Pre-Heat:** 150°C, 1 minute.  
**Solder Composition:** Sn96.5% Ag3% Cu0.5%  
**Solder Temp:** 245°C ± 5°C  
**Immersion Time:** 4 sec. ± 1 sec.  
**Depth:** Completely cover the termination

### Reflow Soldering



Reflow times: 3 times max.

### Test Equipment

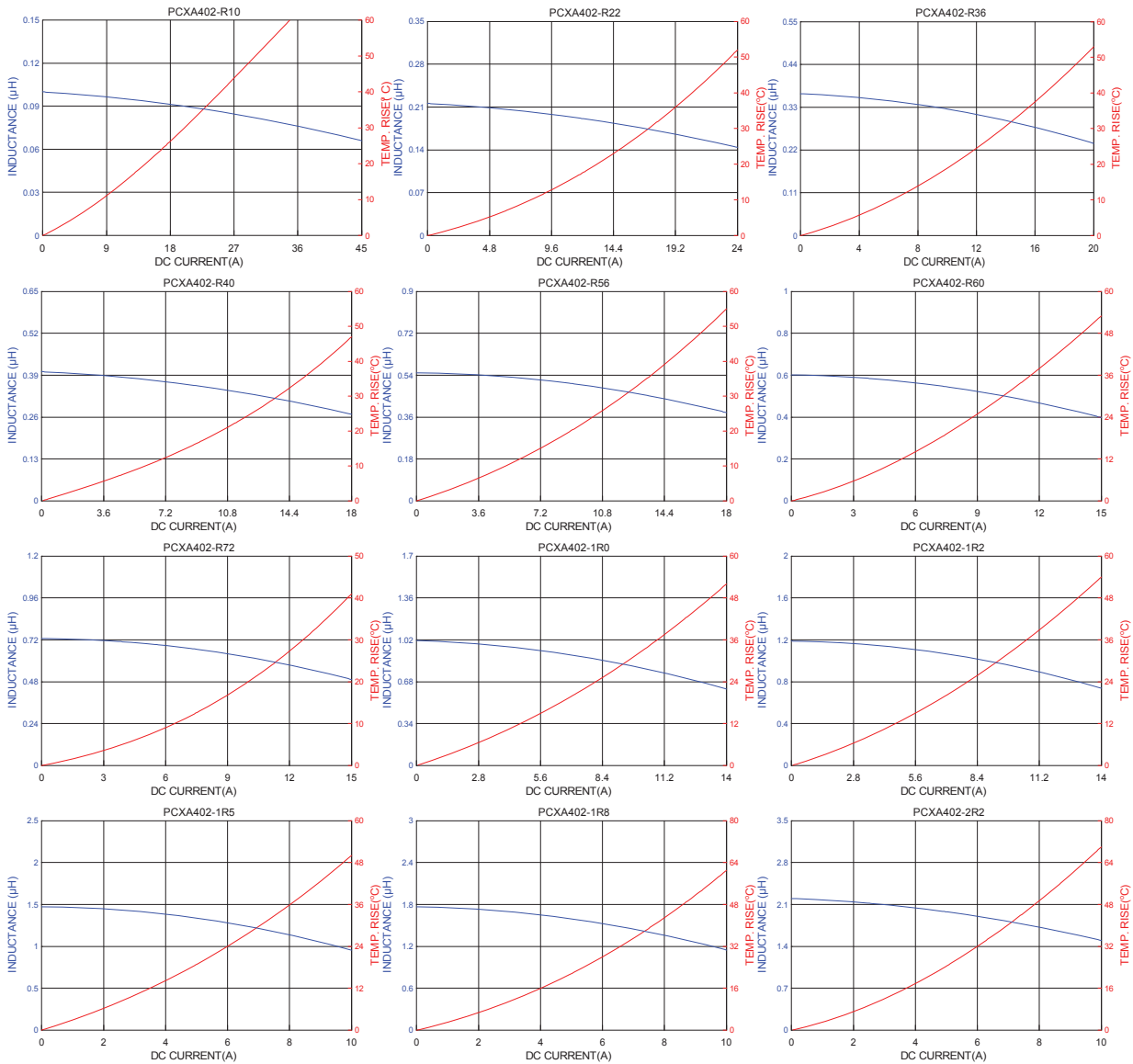
**(L):** HP4284A LCR meter or equivalent  
**DCR:** CH16502, Agilent 33420A Mirco-Ohmmeter

### Physical

**Packaging:** 3000 pieces per 13 inch reel.  
**Marking:** EIA Inductance Code/ Date Code



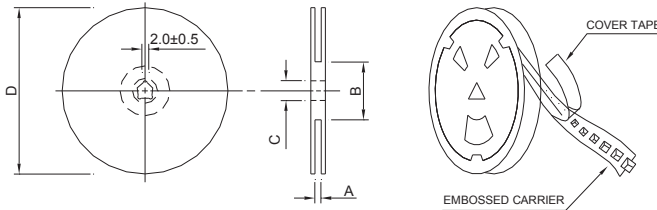
Typical Performance Curves





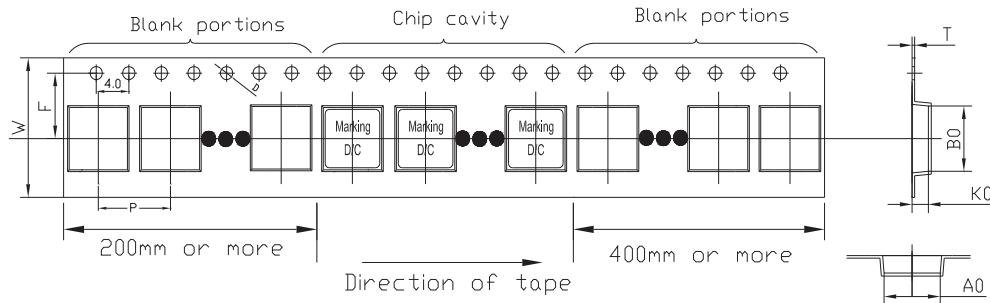
Packaging Information

Reel Dimension



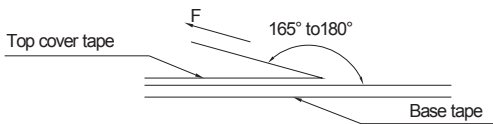
Type	A(mm)	B(mm)	C(mm)	D(mm)
330x12mm	12.4+2/-0	100±2	13+0.5/-0.2	330

Tape Dimension



Bo(mm)	Ao(mm)	Ko(mm)	P(mm)	W(mm)	F(mm)	T(mm)	D(mm)
4.4±0.1	4.4±0.1	2.3±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.1	1.5±0.1

Tearing Off Force



The force for tearing off cover tape is 10 to 130 grams in the arrow direction under the following conditions(referenced ANSI/EIA-481-D-2008 of 4.11 standard).

Room Temp. (°C)	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300

Application Notice

- Storage Conditions
  - To maintain the solderability of terminal electrodes:
  - 1. PCXA402 Series meets IPC/JEDEC J-STD-020D standard-MSL, level 1.
  - 2. Temperature and humidity conditions: Less than 40°C and 60% RH.
  - 3. Recommended products should be used within 12 months form the time of delivery.
  - 4. The packaging material should be kept where no chlorine or sulfur exists in the air.
- Transportation
  - 1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
  - 2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
  - 3. Bulk handling should ensure that abrasion and mechanical shock are minimized.