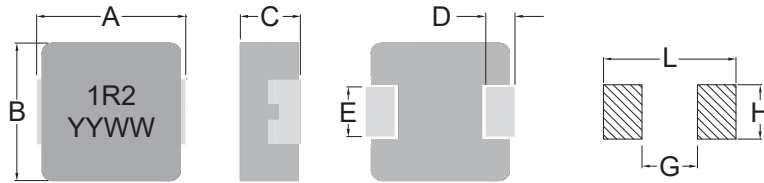




Power Choke High Current

PCHC0503H

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


Recommended PCB Layout

A	B	C	D	E
.224±.012 (5.7±0.3)	.205±.008 (5.2±0.2)	.110±.008 (2.8±0.2)	.043±.012 (1.1±0.3)	.059±.008 (1.5±0.2)

L	G	H
.256 (6.5)	.100 (2.5)	.071 (1.8)

Allied Part Number	Inductance (μH) ±20% @ 0A	DCR (mΩ) Typ. @25°C	DCR (mΩ) Max @25°C	I _{rms} (A) Typ.	I _{sat} (A) Typ.
PCHC0503H-R10N-RC	.10*	2.5	3.0	23.0	27.0
PCHC0503H-R22M-RC	.22	3.7	4.4	15.5	21.0
PCHC0503H-R33M-RC	.33	4.3	5.0	14.0	18.0
PCHC0503H-R47M-RC	.47	6.4	7.4	12.0	16.0
PCHC0503H-R68M-RC	.68	10	12	8.50	14.0
PCHC0503H-1R0M-RC	1.0	13	14	7.00	11.0
PCHC0503H-1R2M-RC	1.2	14	16	6.50	11.0
PCHC0503H-1R5M-RC	1.5	16	25	6.00	10.0
PCHC0503H-2R2M-RC	2.2	25	35	5.50	9.00
PCHC0503H-3R3M-RC	3.3	32	38	5.00	8.00
PCHC0503H-4R7M-RC	4.7	50	53	4.60	6.00
PCHC0503H-5R6M-RC	5.6	55	63	4.25	4.50
PCHC0503H-6R8M-RC	6.8	68	76.2	4.00	4.30
PCHC0503H-100M-RC	10	110	128	2.75	3.50

All specifications subject to change without notice.
*0.10μH value has ±30% tolerance

Features

- Carbonyl Powder
- Low DCR
- Very Low Acoustic Noise & Leakage flux
- Compact Design
- MSL Level 1
- Lead Free and RoHS Compliant

Electrical

Inductance: 0.10μH - 10.0μH

Tolerance: ±20%

Test Frequency: 100KHz, 1.0V

Operating Temp: -40°C to +125°C

I_{rms}: Current at which Δ T=40°C temp rise without core loss.

I_{sat}: Current at which Inductance drop is approximately 30%. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions

Test Equipment

(L): HP4284A, CH11025, CH3302, CH1320, CH1320S LCR meter or equivalent

DCR: CH16502, Agilent 33420A Micro-Ohmmeter

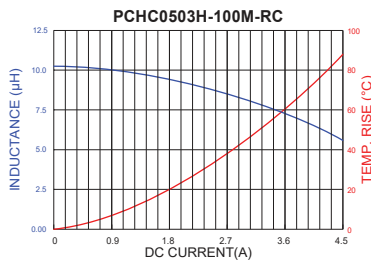
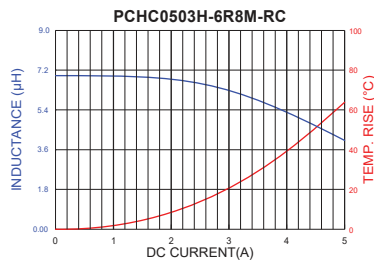
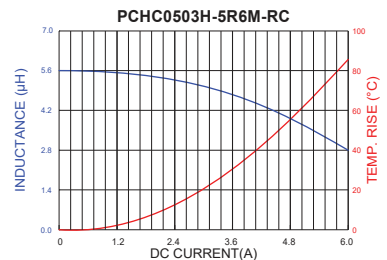
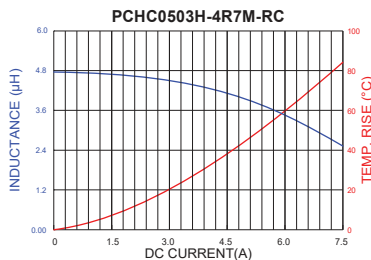
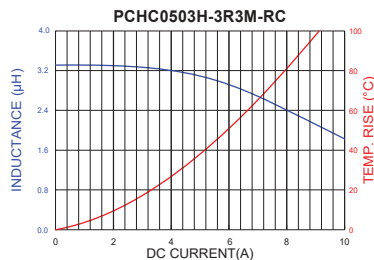
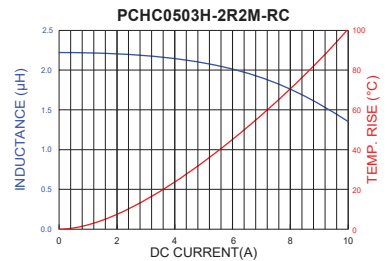
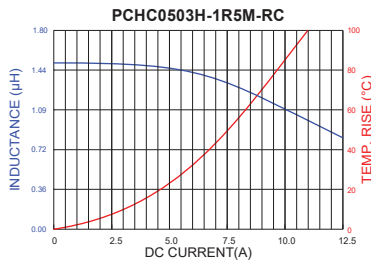
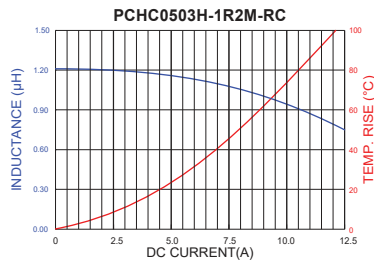
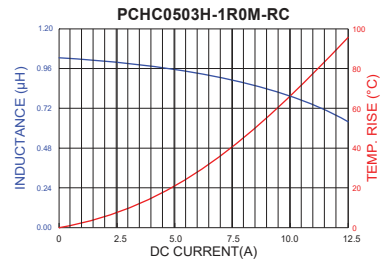
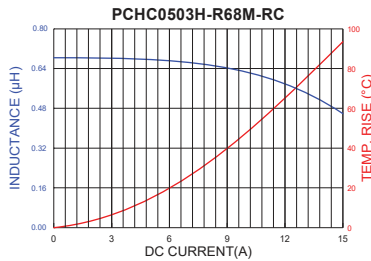
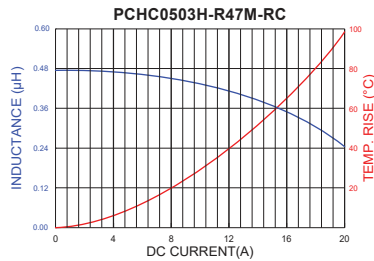
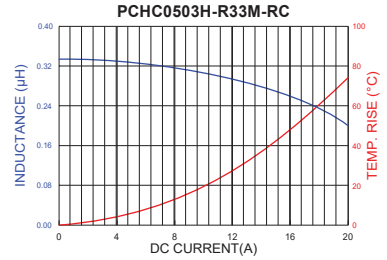
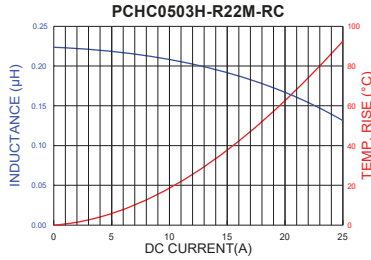
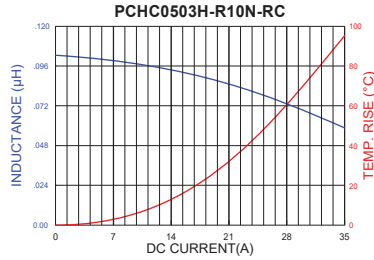
Physical

Packaging: 800 pieces per 13 inch reel

Marking: EIA Inductance Code/ Date Code



Typical Performance Curves





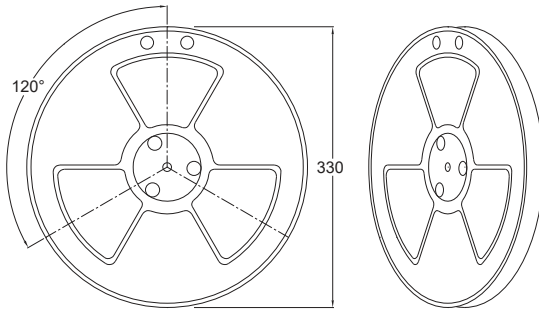
Power Choke High Current

PCHC0503H

Packaging Information

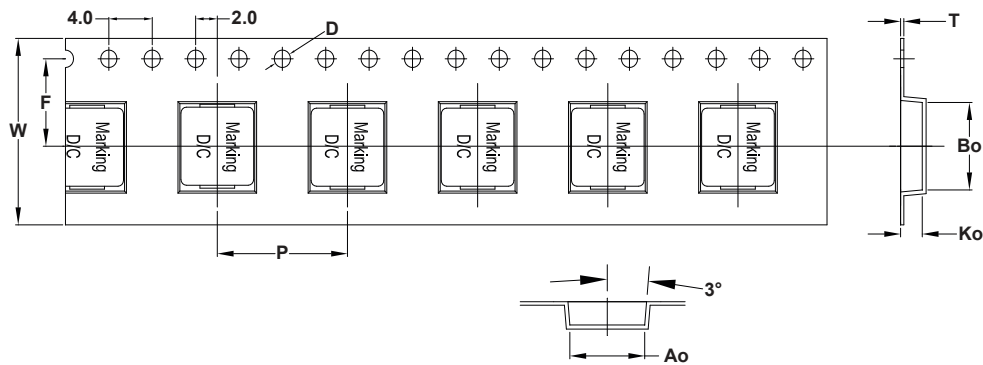
Dimensions: mm

Reel Dimension



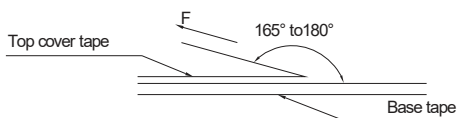
Type	A(mm)	B(mm)	C(mm)	D(mm)
330x16mm	16.4+2/-0	80±2.0	13+0.5/-0.2	330

Tape Dimension



Bo(mm)	Ao(mm)	Ko(mm)	P(mm)	W(mm)	F(mm)	t(mm)	D(mm)
6.2±0.1	5.5±0.1	3.3±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	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-C-2003 of 4.11 standard)

Room Temp. (°C)	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300±10%

Application Notice

• Storage Conditions

- To maintain the solderability of terminal electrodes:
1. PCHC0503H 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 from 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.