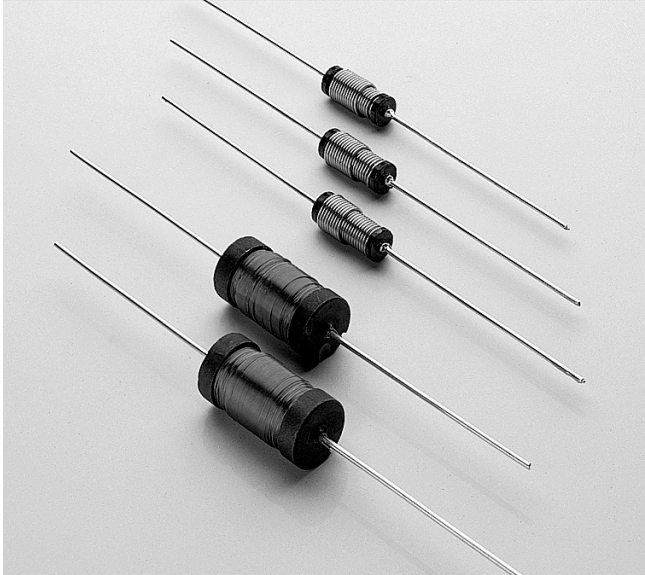




# Axial Lead Power Chokes – PCH-27, 45



- Wide inductance range in a low profile part
- High saturation current—up to 14.3 Amps
- Standard EIA and custom values; most values shipped from stock
- Available with an optional heat-shrink sleeve for additional protection for the windings

**Designers Kit P409** contains 2 each of 30 parts

**Core material** Ferrite

**Core and winding loss** See [www.coilcraft.com/coreloss](http://www.coilcraft.com/coreloss)

**Terminations** RoHS compliant tin-silver over copper. Other terminations available at additional cost.

**Weight** PCH-27: 1.55 – 1.90 g; PCH-45: 6.16 – 8.34 g

**Ambient temperature** –40°C to +85°C

**Storage temperature** Component: –40°C to +85°C.

Tray packaging: –40°C to +80°C

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

**Packaging** 100 parts per tray (standard)

**Optional tape and reel**

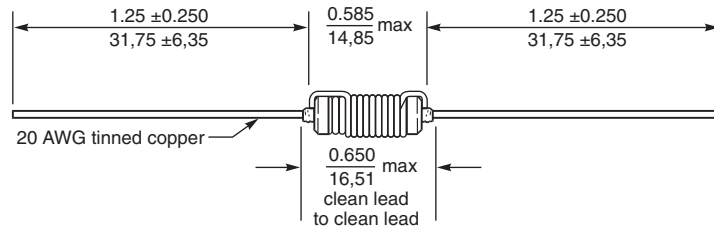
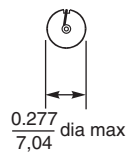
PCH-27: 1000 per 13" reel; 10 mm part spacing

PCH-45: 300 per 13" reel; 15 mm part spacing

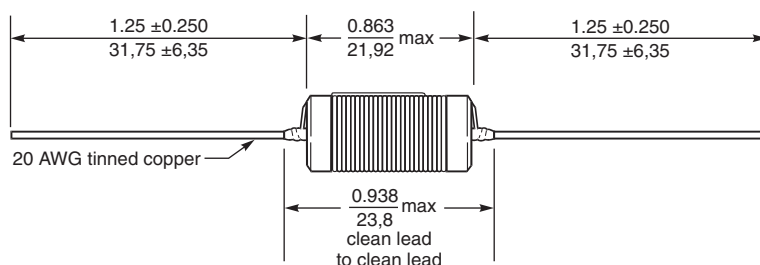
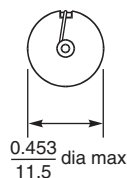
Tape width: 75.5 mm; leads are trimmed to fit tape width.

**PCB washing** Only pure water or alcohol recommended

## PCH-27 Series



## PCH-45 Series



Dimensions are in  $\frac{\text{inches}}{\text{mm}}$



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# Axial Lead Power Chokes – PCH-27

Part number <sup>1</sup>	Inductance nom <sup>2</sup>	Percent tolerance <sup>3</sup>	SRF typ (MHz)	DCR max (Ohms)	Isat <sup>4</sup> (A)	Irms <sup>5</sup> (A)
<b>PCH-27X-392KLT</b>	3.9 µH	<b>10</b>	38	0.017	7.01	1.7
PCH-27X-472KLT	4.7 µH	<b>10</b>	26	0.024	6.16	1.3
PCH-27X-562KLT	5.6 µH	<b>10</b>	25	0.025	5.79	1.3
<b>PCH-27X-682KLT</b>	6.8 µH	<b>10</b>	25	0.028	5.20	1.3
PCH-27X-822KLT	8.2 µH	<b>10</b>	22	0.030	4.70	1.3
PCH-27X-103KLT	10 µH	<b>10</b>	17	0.033	4.30	1.3
<b>PCH-27X-123_LT</b>	12 µH	<b>10,5</b>	16	0.037	3.80	1.3
PCH-27X-153_LT	15 µH	<b>10,5</b>	12	0.041	3.41	1.3
PCH-27X-183_LT	18 µH	<b>10,5</b>	11	0.045	3.09	1.3
<b>PCH-27X-223_LT</b>	22 µH	<b>10,5</b>	10	0.064	2.82	1.0
PCH-27X-273_LT	27 µH	<b>10,5</b>	7	0.071	2.53	1.0
PCH-27X-333_LT	33 µH	<b>10,5</b>	7	0.078	2.29	1.0
<b>PCH-27X-393_LT</b>	39 µH	<b>10,5</b>	7	0.085	2.09	1.0
PCH-27X-473_LT	47 µH	<b>10,5</b>	6	0.094	1.88	1.0
PCH-27X-563_LT	56 µH	<b>10,5</b>	6	0.12	1.74	0.84
<b>PCH-27X-683_LT</b>	68 µH	<b>10,5</b>	7	0.16	1.57	0.67
PCH-27X-823_LT	82 µH	<b>10,5</b>	4	0.22	1.41	0.52
PCH-27X-104_LT	100 µH	<b>10,5</b>	3	0.25	1.28	0.52
<b>PCH-27X-124_LT</b>	120 µH	<b>10,5</b>	3	0.35	1.17	0.42
PCH-27X-154_LT	150 µH	<b>10,5</b>	3	0.39	1.04	0.42
PCH-27X-184_LT	180 µH	<b>10,5</b>	3	0.43	0.943	0.42
<b>PCH-27X-224_LT</b>	220 µH	<b>10,5</b>	3	0.47	0.848	0.42
PCH-27X-274_LT	270 µH	<b>10,5</b>	2	0.65	0.764	0.33
PCH-27X-334_LT	330 µH	<b>10,5</b>	2	0.72	0.690	0.33
<b>PCH-27X-394_LT</b>	390 µH	<b>10,5</b>	2	0.78	0.632	0.33
PCH-27X-474_LT	470 µH	<b>10,5</b>	2	1.04	0.573	0.26
PCH-27X-564_LT	560 µH	<b>10,5</b>	1	1.14	0.520	0.26
<b>PCH-27X-684_LT</b>	680 µH	<b>10,5</b>	1	1.49	0.472	0.21
PCH-27X-824_LT	820 µH	<b>10,5</b>	1	2.14	0.427	0.16
PCH-27X-105_LT	1.0 mH	<b>10,5</b>	1	2.36	0.385	0.16
<b>PCH-27X-125_LT</b>	1.2 mH	<b>10,5</b>	1	2.59	0.350	0.16
PCH-27X-155_LT	1.5 mH	<b>10,5</b>	0.85	3.57	0.312	0.13
<b>PCH-27X-225_LT</b>	2.2 mH	<b>10,5</b>	0.65	4.33	0.255	0.13
PCH-27X-275_LT	2.7 mH	<b>10,5</b>	0.65	5.91	0.229	0.10
PCH-27X-335_LT	3.3 mH	<b>10,5</b>	0.60	8.63	0.207	0.083
<b>PCH-27X-395_LT</b>	3.9 mH	<b>10,5</b>	0.60	9.38	0.189	0.083
PCH-27X-475_LT	4.7 mH	<b>10,5</b>	0.50	10.3	0.172	0.083
PCH-27X-565_LT	5.6 mH	<b>10,5</b>	0.60	11.2	0.157	0.083
<b>PCH-27X-685_LT</b>	6.8 mH	<b>10,5</b>	0.40	15.0	0.142	0.067
PCH-27X-825_LT	8.2 mH	<b>10,5</b>	0.35	21.7	0.128	0.052
PCH-27X-106_LT	10 mH	<b>10,5</b>	0.30	24.0	0.116	0.052
<b>PCH-27X-126_LT</b>	12 mH	<b>10,5</b>	0.25	33.2	0.105	0.040
PCH-27X-156_LT	15 mH	<b>10,5</b>	0.30	47.2	0.094	0.031
PCH-27X-186_LT	18 mH	<b>10,5</b>	0.30	51.7	0.085	0.031
PCH-27X-226_LT	22 mH	<b>10,5</b>	0.25	60.0	0.070	0.025

1. Please specify **sleeve, tolerance, termination** and **packaging** codes:

**PCH-27X-226KLT**

**Sleeve** X = No sleeve, S = Optional heat-shrink sleeve (not stocked)

**Tolerance:** J = 5%, K = 10% (Table shows stock tolerances in bold.)

**Termination:** L = RoHS compliant tin-silver over copper  
Special order: T = RoHS tin-silver-copper (95.5/4/0.5)  
or S = non-RoHS tin-lead (63/37).

**Packaging:** T = 100 per tray  
R = Optional tape and reel (1000 per full 13" reel)

2. Inductance tested at 15.75 kHz, 0.1 Vrms, 25°C ambient.

3. Tolerances in bold are stocked for immediate shipment.

4. DC current at which the inductance drops 10% (typ) from its value without current.

5. Rated current based on 300 circular mils per Amp.

6. Operating temperature range –40°C to +85°C.

7. Electrical specifications at 25°C.

8. Parts in bold type are included in Coilcraft Designer's Kit No. P409.



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# Axial Lead Power Chokes – PCH-45

Part number <sup>1</sup>	Inductance nom <sup>2</sup>	Percent tolerance <sup>3</sup>	SRF typ (MHz)	DCR max (Ohms)	Isat <sup>4</sup> (A)	Irms <sup>5</sup> (A)
PCH-45X-392KLT	3.9 µH	<b>10</b>	34	0.008	14.3	4.3
PCH-45X-472KLT	4.7 µH	<b>10</b>	31	0.009	13.0	4.3
PCH-45X-562KLT	5.6 µH	<b>10</b>	29	0.009	11.9	4.3
PCH-45X-682KLT	6.8 µH	<b>10</b>	26	0.010	11.0	4.3
PCH-45X-822KLT	8.2 µH	<b>10</b>	23	0.011	9.50	4.3
PCH-45X-103KLT	10 µH	<b>10</b>	20	0.012	8.93	4.3
PCH-45X-123KLT	12 µH	<b>10</b>	17	0.013	7.94	4.3
PCH-45X-153KLT	15 µH	<b>10</b>	14	0.015	7.15	4.3
PCH-45X-183KLT	18 µH	<b>10</b>	11	0.016	6.50	4.3
<b>PCH-45X-223_LT</b>	22 µH	<b>10,5</b>	10	0.017	5.95	4.3
PCH-45X-273_LT	27 µH	<b>10,5</b>	9	0.019	5.50	4.3
PCH-45X-333_LT	33 µH	<b>10,5</b>	9	0.021	4.93	4.3
<b>PCH-45X-393_LT</b>	39 µH	<b>10,5</b>	8	0.025	4.46	4.3
PCH-45X-473_LT	47 µH	<b>10,5</b>	7	0.035	4.08	3.4
PCH-45X-563_LT	56 µH	<b>10,5</b>	6	0.037	3.76	3.4
<b>PCH-45X-683_LT</b>	68 µH	<b>10,5</b>	5	0.044	3.40	2.7
PCH-45X-823_LT	82 µH	<b>10,5</b>	4	0.060	3.10	2.1
PCH-45X-104_LT	100 µH	<b>10,5</b>	3	0.086	2.80	1.7
<b>PCH-45X-124_LT</b>	120 µH	<b>10,5</b>	3	0.095	2.55	1.7
PCH-45X-154_LT	150 µH	<b>10,5</b>	3	0.14	2.30	1.3
PCH-45X-184_LT	180 µH	<b>10,5</b>	2	0.15	2.10	1.3
<b>PCH-45X-224_LT</b>	220 µH	<b>10,5</b>	2	0.17	1.90	1.3
PCH-45X-274_LT	270 µH	<b>10,5</b>	2	0.19	1.72	1.3
PCH-45X-334_LT	330 µH	<b>10,5</b>	2	0.21	1.55	1.3
<b>PCH-45X-394_LT</b>	390 µH	<b>10,5</b>	2	0.26	1.43	1.0
PCH-45X-474_LT	470 µH	<b>10,5</b>	1	0.32	1.30	1.0
PCH-45X-564_LT	560 µH	<b>10,5</b>	1	0.38	1.19	0.84
<b>PCH-45X-684_LT</b>	680 µH	<b>10,5</b>	1	0.51	1.08	0.67
PCH-45X-824_LT	820 µH	<b>10,5</b>	1	0.59	0.986	0.67
PCH-45X-105_LT	1.0 mH	<b>10,5</b>	1	0.69	0.893	0.67
<b>PCH-45X-125_LT</b>	1.2 mH	<b>10,5</b>	1	0.78	0.817	0.67
PCH-45X-155_LT	1.5 mH	<b>10,5</b>	0.75	0.92	0.729	0.67
PCH-45X-225_LT	2.2 mH	<b>10,5</b>	0.70	1.67	0.600	0.42
<b>PCH-45X-275_LT</b>	2.7 mH	<b>10,5</b>	0.65	2.28	0.543	0.33
PCH-45X-335_LT	3.3 mH	<b>10,5</b>	0.60	2.59	0.491	0.33
PCH-45X-395_LT	3.9 mH	<b>10,5</b>	0.55	2.87	0.452	0.33
<b>PCH-45X-475_LT</b>	4.7 mH	<b>10,5</b>	0.50	3.22	0.412	0.33
PCH-45X-565_LT	5.6 mH	<b>10,5</b>	0.40	4.25	0.377	0.26
PCH-45X-685_LT	6.8 mH	<b>10,5</b>	0.35	5.88	0.342	0.21
<b>PCH-45X-825_LT</b>	8.2 mH	<b>10,5</b>	0.30	6.46	0.311	0.21
PCH-45X-106_LT	10 mH	<b>10,5</b>	0.30	9.10	0.282	0.16
PCH-45X-126_LT	12 mH	<b>10,5</b>	0.30	9.99	0.257	0.16
<b>PCH-45X-156_LT</b>	15 mH	<b>10,5</b>	0.30	11.2	0.230	0.16
PCH-45X-186_LT	18 mH	<b>10,5</b>	0.20	15.2	0.210	0.13
PCH-45X-226_LT	22 mH	<b>10,5</b>	0.20	16.8	0.190	0.13
<b>PCH-45X-276_LT</b>	27 mH	<b>10,5</b>	0.15	18.6	0.171	0.13
<b>PCH-45X-336_LT</b>	33 mH	<b>10,5</b>	0.15	26.7	0.155	0.10
PCH-45X-396_LT	39 mH	<b>10,5</b>	0.15	29.0	0.143	0.10
<b>PCH-45X-476_LT</b>	47 mH	<b>10,5</b>	0.10	31.8	0.131	0.10
PCH-45X-566_LT	56 mH	<b>10,5</b>	0.10	42.6	0.119	0.083
PCH-45X-686_LT	68 mH	<b>10,5</b>	0.10	46.9	0.108	0.083
<b>PCH-45X-826_LT</b>	82 mH	<b>10,5</b>	0.10	64.9	0.098	0.067
PCH-45X-107_LT	100 mH	<b>10,5</b>	0.10	71.7	0.099	0.067

1. Please specify **sleeve, tolerance, termination** and **packaging** codes:

**PCH-45X-107KLT**

**Sleeve** X = No sleeve, S = Optional heat-shrink sleeve (not stocked)  
**Tolerance:** J = 5%, K = 10% (Table shows stock tolerances in bold.)  
**Termination:** L = RoHS compliant tin-silver over copper  
Special order: T = RoHS tin-silver-copper (95.5/4/0.5)  
or S = non-RoHS tin-lead (63/37).  
**Packaging:** T = 100 per tray  
R = Optional tape and reel (1000 per full 13" reel)

2. Inductance tested at 15.75 kHz, 0.1 Vrms, 25°C ambient.

3. Tolerances in bold are stocked for immediate shipment.

4. DC current at which the inductance drops 10% (typ) from its value without current.

5. Rated current based on 300 circular mils per Amp.

6. Operating temperature range -40°C to +85°C.

7. Electrical specifications at 25°C.

8. Parts in bold type are included in Coilcraft Designer's Kit No. P409.



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