

- Features:
- Compact, low profile with low DCR and high current
 - Provides magnetic shielding against radiation
 - Flat bottom provides reliable surface mounting
 - Contact factory for inductance values outside those listed
 - Find environmental information and packaging specification in relate supplemental documents



- Applications:
- Portable telephones
 - GPS and PDAs
 - Personal computers
 - DC/DC converters

Inductance and Current Ranges		
Type	Inductance (μH)	Current Range (A)
PCDR0628	4.7 - 100	1.6 - 0.42
PCDR0728	3.3 - 56	1.6 - 0.50
PCDR0730	3.3 - 100	1.8 - 0.35
PCDR0732	3.3 - 1000	1.9 - 0.13
PCDR0745	3.3 - 1000	2.5 - 0.14
PCDR1045	10.0 - 1500	3.0 - 0.22
PCDR1255	6.0 - 1500	3.6 - 0.29
PCDR1265	2.0 - 150	10.0 - 1.00
PCDR1275	1.2 - 220	13.0 - 1.30

Electrical specifications at 25°C.

How to Order

1	2	3	4	5	6	7	8	9	10	11	12	13
P	C	D	R	0	6	2	8	M	T	1	0	1

Product Series	
PCDR	

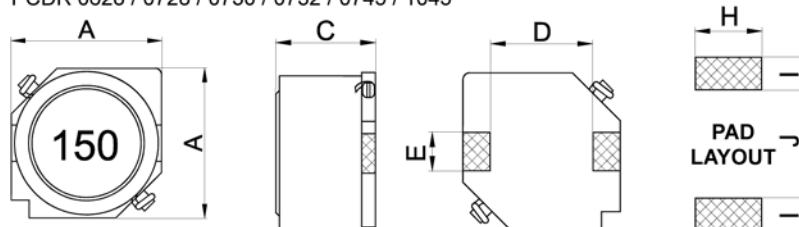
Code	Dimensions (mm)
0628	6.0x2.8
0728	7.0x2.8
0730	7.0x3.0
0732	7.0x3.2
0745	7.0x4.5
1045	10.1x4.5
1255	12.5x5.5
1265	12.5x6.5
1275	12.5x7.5

Tolerance	
Code	Tol
M	20%
N	30%

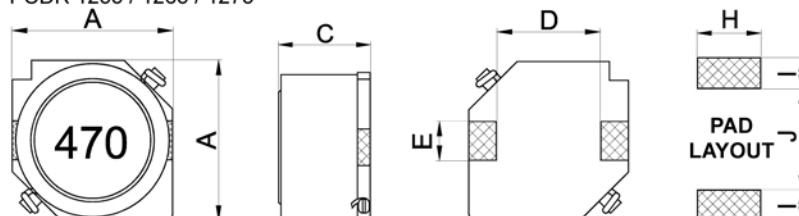
Packaging			
Code	Description	Size	Quantity
T	13" Tape and Reel	0628, 0728, 0730, 0732, 0745	1,000
		1045	750
		1255, 1265	500
		1275	350

Inductance	
Code	Inductance
1R1	1.1 uH
470	47 uH
101	100 uH

PCDR 0628 / 0728 / 0730 / 0732 / 0745 / 1045



PCDR 1255 / 1265 / 1275



Mechanical Specifications

Type/Code	A	C	D	E	H	I	J	Unit
PCDR0628	0.236 ± 0.008 6.00 ± 0.20	0.110 ± 0.008 2.80 ± 0.20	0.157 4.00	0.079 2.00	0.087 2.20	0.059 1.50	0.157 4.00	inches mm
PCDR0728	0.276 ± 0.008 7.00 ± 0.20	0.110 ± 0.008 2.80 ± 0.20	0.157 4.00	0.079 2.00	0.087 2.20	0.059 1.50	0.157 4.00	inches mm
PCDR0730	0.276 ± 0.008 7.00 ± 0.20	0.118 ± 0.008 3.00 ± 0.20	0.157 4.00	0.079 2.00	0.087 2.20	0.059 1.50	0.157 4.00	inches mm
PCDR0732	0.276 ± 0.008 7.00 ± 0.20	0.126 ± 0.008 3.20 ± 0.20	0.157 4.00	0.079 2.00	0.087 2.20	0.059 1.50	0.157 4.00	inches mm
PCDR0745	0.276 ± 0.008 7.00 ± 0.20	0.177 ± 0.012 4.50 ± 0.30	0.157 4.00	0.079 2.00	0.087 2.20	0.059 1.50	0.157 4.00	inches mm
PCDR1045	0.398 ± 0.012 10.10 ± 0.30	0.177 ± 0.012 4.50 ± 0.30	0.236 6.00	0.118 3.00	0.126 3.20	0.098 2.50	0.220 5.60	inches mm
PCDR1255	0.492 ± 0.012 12.50 ± 0.30	0.217 ± 0.014 5.50 ± 0.35	0.339 8.60	0.118 3.00	0.126 3.20	0.098 2.50	0.339 8.60	inches mm
PCDR1265	0.492 ± 0.012 12.50 ± 0.30	0.256 ± 0.014 6.50 ± 0.35	0.339 8.60	0.118 3.00	0.126 3.20	0.098 2.50	0.339 8.60	inches mm
PCDR1275	0.492 ± 0.012 12.50 ± 0.30	0.295 ± 0.014 7.50 ± 0.35	0.339 8.60	0.118 3.00	0.126 3.20	0.098 2.50	0.339 8.60	inches mm

Performance Characteristics

Saturation Rated Current (I sat)	0628 ~ 1275 The current when the inductance becomes 30% lower than its nominal value (Ta=25°C)
Temperature Rated Current (I rms)	The actual current when the temperature of coil becomes to Δ40°C (Ta=25°C)
Operating Temperature Range	-40 ~ 85°C

Electrical Specifications – PCDR 0628, 0728, 0730

Type / Code	L (μ H)	Tolerance	Test Condition	DCR (Ω) $\pm 20\%$			IDC (A) max.					
							I sat			I rms		
				0628	0728	0730	0628	0728	0730	0628	0728	0730
3R3	3.3	M	1KHz, 0.5V	-	0.037	0.023	-	1.60	1.80	-	1.60	1.80
4R7	4.7	M	1KHz, 0.5V	0.036	0.045	0.036	1.60	1.50	1.60	2.50	1.50	1.60
6R8	6.8	M	1KHz, 0.5V	0.052	0.059	0.041	1.50	1.30	1.50	2.20	1.30	1.50
100	10	M	1KHz, 0.5V	0.068	0.083	0.053	1.30	1.10	1.30	1.80	1.10	1.30
150	15	M	1KHz, 0.5V	0.100	0.130	0.084	1.00	0.88	1.00	1.40	0.88	1.00
220	22	M	1KHz, 0.5V	0.120	0.180	0.110	0.77	0.75	0.86	1.30	0.75	0.86
330	33	M	1KHz, 0.5V	0.180	0.240	0.160	0.69	0.65	0.65	1.10	0.65	0.65
470	47	M	1KHz, 0.5V	0.270	0.340	0.240	0.59	0.54	0.57	0.92	0.54	0.57
560	56	M	1KHz, 0.5V	0.330	0.420	0.280	0.51	0.50	0.53	0.85	0.45	0.60
680	68	M	1KHz, 0.5V	0.390	-	0.310	0.50	-	0.49	0.78	-	0.49
101	100	M	1KHz, 0.5V	0.620	-	0.450	0.42	-	0.35	0.64	-	0.35

Electrical Specifications – PCDR 0732, 0745, 1045

Type / Code	L (μ H)	Tolerance	Test Condition	DCR (Ω) $\pm 20\%$			IDC (A) max.					
							I sat			I rms		
				0732	0745	1045	0732	0745	1045	0732	0745	1045
3R3	3.3	M	1KHz, 0.5V	0.023	0.020	-	1.90	2.50	-	1.90	2.30	-
4R7	4.7	M	1KHz, 0.5V	0.036	0.030	-	1.70	2.00	-	1.70	2.10	-
6R8	6.8	M	1KHz, 0.5V	0.041	0.039	-	1.60	1.70	-	1.60	1.74	-
100	10	M	1KHz, 0.5V	0.053	0.036	0.036	1.40	1.30	3.00	1.40	1.78	2.50
150	15	M	1KHz, 0.5V	0.075	0.052	0.047	1.10	1.10	2.40	1.10	1.53	2.20
220	22	M	1KHz, 0.5V	0.110	0.061	0.059	0.96	0.90	2.10	0.96	1.34	1.90
330	33	M	1KHz, 0.5V	0.160	0.096	0.082	0.75	0.82	1.60	0.75	1.09	1.70
470	47	M	1KHz, 0.5V	0.240	0.125	0.100	0.67	0.75	1.40	0.67	0.92	1.50
560	56	M	1KHz, 0.5V	0.300	0.130	0.110	0.60	0.67	1.30	0.70	0.88	1.40
680	68	M	1KHz, 0.5V	0.310	0.175	0.140	0.59	0.60	1.20	0.59	0.77	1.30
101	100	M	1KHz, 0.5V	0.450	0.250	0.200	0.45	0.50	1.00	0.45	0.65	1.10
151	150	M	1KHz, 0.5V	0.650	0.340	0.350	0.37	0.40	0.79	0.37	0.55	0.81
221	220	M	1KHz, 0.5V	1.050	0.520	0.370	0.29	0.33	0.65	0.29	0.45	0.70
331	330	M	1KHz, 0.5V	1.670	0.740	0.680	0.22	0.25	0.54	0.22	0.37	0.58
471	470	M	1KHz, 0.5V	2.050	1.050	1.030	0.20	0.22	0.47	0.20	0.31	0.47
681	680	M	1KHz, 0.5V	3.150	1.480	1.600	0.16	0.20	0.38	0.16	0.27	0.38
102	1000	M	1KHz, 0.5V	4.780	2.280	2.800	0.13	0.14	0.32	0.13	0.25	0.29
152	1500	M	1KHz, 0.5V	-	-	3.400	-	-	0.22	-	-	0.26

Electrical Specifications – PCDR 1255, 1265, 1275

Type / Code	L (μ H)	Tolerance	Test Condition	DCR (Ω) $\pm 20\%$			IDC (A) max.					
							I sat			I rms		
				1255	1265	1275	1255	1265	1275	1255	1265	1275
1R2	1.2	N	1KHz, 0.5V	-	-	0.0069	-	-	13.00	-	-	8.20
2R0	2.0	N	1KHz, 0.5V	-	0.0117	-	-	10.00	-	-	6.20	-
2R7	2.7	N	1KHz, 0.5V	-	-	0.0094	-	-	10.00	-	-	7.00
3R9	3.9	N	1KHz, 0.5V	-	-	0.0104	-	-	9.00	-	-	6.70
4R2	4.2	N	1KHz, 0.5V	-	0.0150	-	-	7.30	-	-	5.50	-
5R6	5.6	N	1KHz, 0.5V	-	-	0.0116	-	-	7.80	-	-	6.30
6R0	6.0	N	1KHz, 0.5V	0.0164	-	-	3.60	-	-	4.90	-	-
6R8	6.8	N	1KHz, 0.5V	-	-	0.0131	-	-	7.20	-	-	5.90
7R0	7.0	M	1KHz, 0.5V	-	0.0177	-	-	5.70	-	-	5.00	-
100	10	M	1KHz, 0.5V	0.0215	0.0202	0.0156	3.40	5.00	5.50	4.30	4.80	5.40
150	15	M	1KHz, 0.5V	0.0259	0.0237	0.0184	2.80	4.20	4.70	3.90	4.40	5.00
220	22	M	1KHz, 0.5V	0.0338	0.0316	0.0263	2.30	3.50	4.00	3.40	3.80	4.00
330	33	M	1KHz, 0.5V	0.0415	0.0406	0.0395	1.90	2.80	3.20	3.10	3.40	3.40
470	47	M	1KHz, 0.5V	0.0618	0.0578	0.0528	1.60	2.40	2.70	2.50	2.80	3.00
560	56	M	1KHz, 0.5V	0.0750	0.0750	0.0670	1.45	2.20	2.30	2.30	2.50	2.60
680	68	M	1KHz, 0.5V	0.0832	0.0787	0.0778	1.30	2.00	2.00	2.20	2.40	2.40
101	100	M	1KHz, 0.5V	0.1170	0.1230	0.1250	1.10	1.60	1.90	1.80	1.90	1.90
121	120	M	1KHz, 0.5V	-	0.1850	-	-	1.30	-	-	1.50	-
151	150	M	1KHz, 0.5V	0.1900	0.2730	0.1750	0.88	1.00	1.50	1.40	1.20	1.60
221	220	M	1KHz, 0.5V	0.2700	-	0.2580	0.72	-	1.30	1.20	-	1.30
331	330	M	1KHz, 0.5V	0.4100	-	-	0.59	-	-	1.00	-	-
471	470	M	1KHz, 0.5V	0.5200	-	-	0.49	-	-	0.88	-	-
681	680	M	1KHz, 0.5V	0.7600	-	-	0.43	-	-	0.73	-	-
102	1000	M	1KHz, 0.5V	1.1200	-	-	0.34	-	-	0.60	-	-
152	1500	M	1KHz, 0.5V	1.7300	-	-	0.29	-	-	0.48	-	-