

Shielded SMD Power Inductor – PCS



Features

- High power, High saturation inductors
- With magnetically shielded against radiation
- Directly connected electrode on ferrite core
- Highly accurate dimensions for surface mounting

Applications

- Power Supply for VTRs.
- LCD Televisions
- Personal Computers
- Handheld Communication Equipment
- DC/DC Converters, etc.

Characteristics

- Rated DC Current: The DC current at which the inductance becomes 25% lower than its initial value or when $\Delta t=40^{\circ}\text{C}$, whichever is lower. ($T_a=25^{\circ}\text{C}$)
- Operating temperature range: $-40\sim 85^{\circ}\text{C}$

Inductance and rated current ranges

– PCS62B	2.9 μH ~330 μH	1.94~0.19A
– PCS64B	10 μH ~1000 μH	1.35~0.14A
– PCS73	6.8 μH ~1000 μH	2.0~0.16A
– PCS74	1.0 μH ~1000 μH	8.0~0.18A
– PCS124	2.5 μH ~330 μH	8.0~0.5A
– PCS125	1.3 μH ~1000 μH	8.0~0.4A
– PCS127	1.2 μH ~1000 μH	9.8~0.55A

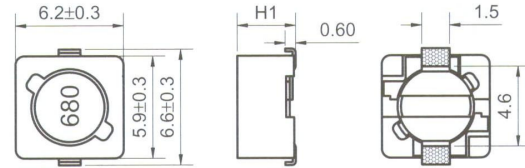
– Test equipment:

L: HP4284A or HP4285A LCR meter

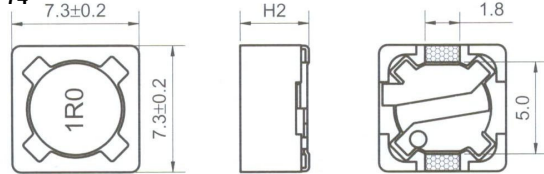
DCR: Milli-ohm meter

– Electrical specifications at 25 $^{\circ}\text{C}$

PCS62B / 64B



PCS73 / 74



PCS124 / 125 / 127



Dimensions

Unit: mm

Type	H1 max.	H2 max.	H3 max.	H	I	J
PCS62B	3.0	-	-	1.9	1.4	4.6
PCS64B	5.0	-	-	1.9	1.4	4.6
PCS73	-	3.4	-	2.2	1.6	4.8
PCS74	-	4.5	-	2.2	1.6	4.8
PCS124	-	-	4.5	5.4	2.9	7.0
PCS125	-	-	6.0	5.4	2.9	7.0
PCS127	-	-	8.0	5.4	2.9	7.0

Product Identification

PCS	62B	M	T	101
Product Type	Dimensions (AxBxC)	Inductor Tolerance	Packaging Style	Inductance
	62B: 6.2×6.6×3.0 64B: 6.2×6.6×5.0 73: 7.3×7.3×3.4 74: 7.3×7.3×4.5 124: 12×12×4.5 125: 12×12×6.0 127: 12×12×8.0	M: $\pm 20\%$ P: +40%-20%	T: Tape and Reel	1R1: 1.1 μH 470: 47 μH 101: 100 μH

Electrical Characteristics

PCS62B / 64B / 73 / 74 Type

Codes	L (μ H)	DCR (Ω) max.				IDC (A) max.			
		62B	64B	73	74	62B	64B	73	74
1R0	1.0	-	-	-	0.020	-	-	-	8.000
2R9	2.9	0.068	-	-	-	1.940	-	-	-
3R3	3.3	-	-	-	0.032	-	-	-	4.800
4R0	4.0	0.080	-	-	-	1.630	-	-	-
5R5	5.5	0.096	-	-	-	1.400	-	-	-
6R8	6.8	-	-	0.060	0.045	-	-	2.000	3.000
100	10	0.150	0.120	0.072	0.049	1.100	1.350	1.680	1.840
120	12	0.200	0.130	0.098	0.058	1.000	1.220	1.520	1.710
150	15	0.230	0.180	0.130	0.081	0.900	1.110	1.330	1.470
180	18	0.270	0.240	0.140	0.091	0.800	1.020	1.200	1.310
220	22	0.340	0.270	0.190	0.110	0.740	0.910	1.070	1.230
270	27	0.380	0.300	0.210	0.150	0.660	0.820	0.960	1.120
330	33	0.450	0.330	0.240	0.170	0.590	0.740	0.910	0.960
390	39	0.490	0.370	0.320	0.230	0.540	0.690	0.770	0.910
470	47	0.690	0.520	0.360	0.260	0.500	0.620	0.760	0.880
560	56	0.780	0.560	0.470	0.350	0.460	0.580	0.680	0.750
680	68	1.070	0.630	0.520	0.380	0.420	0.510	0.610	0.690
820	82	1.210	0.710	0.690	0.430	0.380	0.460	0.570	0.610
101	100	1.390	1.030	0.790	0.610	0.340	0.420	0.500	0.600
121	120	1.900	1.150	0.890	0.660	0.310	0.380	0.490	0.520
151	150	2.180	1.680	1.270	0.880	0.280	0.350	0.430	0.460
181	180	2.770	1.870	1.450	0.980	0.260	0.320	0.390	0.420
221	220	3.120	2.080	1.650	1.170	0.230	0.290	0.350	0.360
271	270	4.380	2.370	2.310	1.640	0.220	0.260	0.320	0.340
331	330	4.940	2.670	2.620	1.860	0.190	0.230	0.280	0.320
391	390	-	2.940	2.940	2.850	-	0.220	0.260	0.290
471	470	-	3.930	4.180	3.010	-	0.200	0.240	0.260
561	560	-	5.430	4.670	3.620	-	0.180	0.220	0.230
681	680	-	7.320	5.730	4.630	-	0.170	0.190	0.220
821	820	-	8.240	6.540	5.200	-	0.150	0.180	0.200
102	1000	-	9.260	9.440	6.000	-	0.140	0.160	0.180

Inductance Tolerance & Measuring Freq:

62B: 2.9~5.5 μ H (P)+40%~-20% @7.96MHz 0.25V; 10~330 μ H (M) \pm 20% @1KHz 0.25V

64B: 10~1000 μ H (M) \pm 20% @1KHz 0.25V

73: 6.8~1000 μ H (M) \pm 20% @1KHz 0.25V

74: 1.0~3.3 μ H (M) \pm 20% @100KHz 0.25V; 6.8~1000 μ H (M) \pm 20% @1KHz 0.25V

Electrical Characteristics

PCS124 / 125 / 127 Type

Codes	L (μ H)	DCR (Ω) max.			IDC (A) max.		
		124	125	127	124	125	127
1R2	1.2	-	-	0.007	-	-	9.80
1R3	1.3	-	0.012	-	-	8.00	-
2R1	2.1	-	0.014	-	-	7.00	-
2R2	2.2	-	0.010	0.010	-	7.00	8.50
2R4	2.4	-	-	0.012	-	-	8.00
2R5	2.5	0.013	-	-	8.00	-	-
2R7	2.7	-	-	0.012	-	-	8.00
3R1	3.1	-	0.017	-	-	6.00	-
3R3	3.3	-	0.014	0.013	-	6.75	7.80
3R5	3.5	-	-	0.014	-	-	7.50
3R9	3.9	0.015	-	-	6.50	-	-
4R4	4.4	-	0.020	-	-	5.00	-
4R7	4.7	0.018	0.018	0.016	5.70	6.20	6.80
5R6	5.6	-	-	0.014	-	-	6.70
5R8	5.8	-	0.021	-	-	4.40	-
6R1	6.1	-	-	0.018	-	-	6.60
6R8	6.8	0.023	0.023	0.014	4.90	5.90	6.40
7R5	7.5	-	0.024	-	-	4.20	-
7R6	7.6	-	-	0.020	-	-	5.90
8R2	8.2	0.026	-	-	4.60	-	-
100	10	0.028	0.025	0.022	4.50	4.00	5.40
120	12	0.038	0.027	0.024	4.00	3.50	4.90
150	15	0.050	0.030	0.027	3.20	3.30	4.50
180	18	0.057	0.034	0.039	3.10	3.00	3.90
220	22	0.066	0.036	0.043	2.90	2.80	3.60
270	27	0.080	0.051	0.046	2.80	2.30	3.40
330	33	0.097	0.057	0.065	2.70	2.10	3.00
390	39	0.132	0.068	0.073	2.10	2.00	2.75
470	47	0.150	0.075	0.100	1.90	1.80	2.50
560	56	0.190	0.110	0.110	1.80	1.70	2.35
680	68	0.220	0.120	0.140	1.50	1.50	2.10
820	82	0.260	0.140	0.160	1.30	1.40	1.95
101	100	0.308	0.160	0.220	1.20	1.30	1.70
121	120	0.380	0.170	0.250	1.10	1.10	1.60
151	150	0.530	0.230	0.280	0.95	1.00	1.42
181	180	0.620	0.290	0.350	0.85	0.90	1.30
221	220	0.700	0.400	0.390	0.80	0.80	1.16
271	270	0.876	0.460	0.560	0.60	0.75	1.06
331	330	0.990	0.510	0.640	0.50	0.68	0.95
391	390	-	0.690	0.700	-	0.65	0.88
471	470	-	0.770	0.980	-	0.58	0.79
561	560	-	0.860	1.070	-	0.54	0.73
681	680	-	1.200	1.460	-	0.48	0.67
821	820	-	1.340	1.640	-	0.43	0.60
102	1000	-	1.530	1.820	-	0.40	0.55

Inductance Tolerance & Measuring Freq:

PCS124: 2.5~330 μ H (M) \pm 20% @100KHz 0.25V

PCS125: 1.3~7.5 μ H (M) \pm 20% @7.96MHz 0.25V; 10~1000 μ H (M) \pm 20% @1KHz 0.25V

PCS127: 1.2~7.6 μ H (M) \pm 20% @100KHz 0.25V; 10~1000 μ H (M) \pm 20% @1KHz 0.25V