

Shielded SMD Power Inductor—PCS



Applications

- Power supply for VTRs.
- LCD televisions.
- Personal computers.
- Handhold communication equipment.
- DC/DC converters, etc.

Features

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

Inductance and rated current ranges

- PCS62B 2.9 μ H~330 μ H 1.94~0.19A
- PCS64B 10 μ H~1000 μ H 1.35~0.14A
- PCS73 10 μ H~1000 μ H 1.68~0.16A
- PCS74 10 μ H~1000 μ H 1.84~0.18A
- PCS124 3.9 μ H~330 μ H 6.5~0.5A
- PCS125 1.3 μ H~1000 μ H 8.0~0.4A
- PCS127 1.2 μ H~47 μ H 9.8~2.5A

- Test equipment:

L: HP4284A or HP4285A LCR meter.

DC R tested by Milli-ohm meter.

Electrical specification at 25°C .



Product Identification

PCS 62B M I 101

(1) (2) (3) (4) (5)

(1)Type: Shielded SMD Power Inductor

(2)Dimensions (mm): 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

(3)Tolerance: M=20%, P=+40%-20%

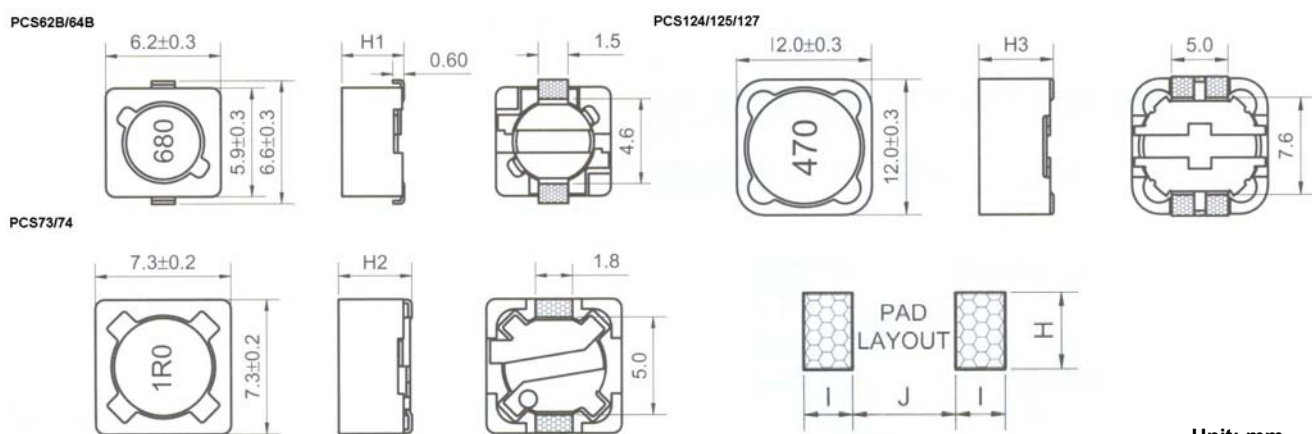
(4)Packaging style: T (Tape and Reel)

(5)Inductance: 1R1=1.1 μ H, 470=47 μ H, 101 =100mH

Characteristics:

- Rated DC Current: The current when the inductance decreases to 75% of its initial value or the actual current when the temperature of coil increases to 40°C. The smaller one is defined as Rated DC Current. (Ta=25°C)
- Operating temperature range: -20~80°C.

Dimensions



Unit: mm

Codes	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

Electrical Characteristics

62B / 64B / 73 / 74 TYPE

Part No.	L (μH)	DC Resistance (Ω) Max				Rated DC current (A) Max			
		PCS62B	PCS64B	PCS73	PCS74	PCS62B	PCS64B	PCS73	PCS74
2R9P	2.9	0.068	-	-	-	1.940	-	-	-
4R0P	4.0	0.080	-	-	-	1.630	-	-	-
5R5P	5.5	0.096	-	-	-	1.400	-	-	-
100M	10	0.150	0.120	0.072	0.049	1.100	1.350	1.680	1.840
120M	12	0.200	0.130	0.098	0.058	1.000	1.220	1.520	1.710
150M	15	0.230	0.180	0.130	0.081	0.900	1.110	1.330	1.470
180M	18	0.270	0.240	0.140	0.091	0.800	1.020	1.200	1.310
220M	22	0.340	0.270	0.190	0.110	0.740	0.910	1.070	1.230
270M	27	0.380	0.300	0.210	0.150	0.660	0.820	0.960	1.120
330M	33	0.450	0.330	0.240	0.170	0.590	0.740	0.910	0.960
390M	39	0.490	0.370	0.320	0.230	0.540	0.690	0.770	0.910
470M	47	0.690	0.520	0.360	0.260	0.500	0.620	0.760	0.880
560M	56	0.780	0.560	0.470	0.350	0.460	0.580	0.680	0.750
680M	68	1.070	0.630	0.520	0.380	0.420	0.510	0.610	0.690
820M	82	1.210	0.710	0.690	0.430	0.380	0.460	0.570	0.610
101M	100	1.390	1.030	0.790	0.610	0.340	0.420	0.500	0.600
121M	120	1.900	1.150	0.890	0.660	0.310	0.380	0.490	0.520
151M	150	2.180	1.680	1.270	0.880	0.280	0.350	0.430	0.460
181M	180	2.770	1.870	1.450	0.980	0.260	0.320	0.390	0.420
221M	220	3.120	2.080	1.650	1.170	0.230	0.290	0.350	0.360
271M	270	4.380	2.370	2.310	1.640	0.220	0.260	0.320	0.340
331M	330	4.940	2.670	2.620	1.860	0.190	0.230	0.280	0.320
391M	390	-	2.940	2.940	2.850	-	0.220	0.260	0.290
471M	470	-	3.930	4.180	3.010	-	0.200	0.240	0.260
561M	560	-	5.430	4.670	3.620	-	0.180	0.220	0.230
681M	680	-	7.320	5.730	4.630	-	0.170	0.190	0.220
821M	820	-	8.240	6.540	5.200	-	0.150	0.180	0.200
102M	1000	-	9.260	9.440	6.000	-	0.140	0.160	0.180

Tolerance of inductance and Measuring Freq:

PCS62B: 2.9~5.5μH (P) +40-20% @7.67MHz 0.25V ; 10~330μH (M) ±20% @1KHz 0.25V

PCS64B, PCS73, PCS74: 10~1000μH (M) ±20% @1KHz 0.25V

Electrical Characteristics

124 / 125 / 127/ TYPE

Part No.	L (μH)	DC Resistance (Ω) Max			Rated DC current (A) Max		
		PCS124	PCS125	PCS127	PCS124	PCS125	PCS127
1R2	1.2	-	-	0.0070	-	-	9.80
1R3	1.3	-	0.012	-	-	8.00	-
2R1	2.1	-	0.014	-	-	7.00	-
2R4	2.4	-	-	0.0115	-	-	8.00
3R1	3.1	-	0.017	-	-	6.00	-
3R5	3.5	-	-	0.0135	-	-	7.50
3R9	3.9	0.015	-	-	6.50	-	-
4R4	4.4	-	0.020	-	-	5.00	-
4R7	4.7	0.018	-	0.0158	5.70	-	6.80
5R8	5.8	-	0.021	-	-	4.40	-
6R1	6.1	-	-	0.0176	-	-	6.60
6R8	6.8	0.023	-	-	4.90	-	-
7R5	7.5	-	0.024	-	-	4.20	-
7R6	7.6	-	-	0.0200	-	-	5.90
100	10	0.028	0.025	0.0216	4.50	4.00	5.40
120	12	0.038	0.027	0.0243	4.00	3.50	4.90
150	15	0.050	0.030	0.0270	3.20	3.30	4.50
180	18	0.057	0.034	0.0392	3.10	3.00	3.90
220	22	0.066	0.036	0.0432	2.90	2.80	3.60
270	27	0.080	0.051	0.0459	2.80	2.30	3.40
330	33	0.097	0.057	0.0648	2.70	2.10	3.00
390	39	0.132	0.068	0.0729	2.10	2.00	2.75
470	47	0.150	0.075	0.1000	1.90	1.80	2.50
560	56	0.190	0.110	-	1.80	1.70	-
680	68	0.220	0.120	-	1.50	1.50	-
820	82	0.260	0.140	-	1.30	1.40	-
101	100	0.308	0.160	-	1.20	1.30	-
121	120	0.380	0.170	-	1.10	1.10	-
151	150	0.530	0.230	-	0.95	1.00	-
181	180	0.620	0.290	-	0.85	0.90	-
221	220	0.700	0.400	-	0.80	0.80	-
271	270	0.876	0.460	-	0.60	0.75	-
331	330	0.990	0.510	-	0.50	0.68	-
391	390	-	0.690	-	-	0.65	-
471	470	-	0.770	-	-	0.58	-
561	560	-	0.860	-	-	0.54	-
681	680	-	1.200	-	-	0.48	-
821	820	-	1.340	-	-	0.43	-
102	1000	-	1.530	-	-	0.40	-

Tolerance of inductance and Measuring Freq:

PCS124: 3.9~330μH (M) ±20% @100KHz 0.25V

PCS125: 1.3~7.5μH (P)+40-20% @7.96MHz 0.25V ; 10~1000μH (M)±20% @ 1KHz 0.25V

PCS127: 1.2~7.6μH (P)+40-20% @100MHz 0.25V ; 10~47μH (M)±20% @ 1KHz 0.25V