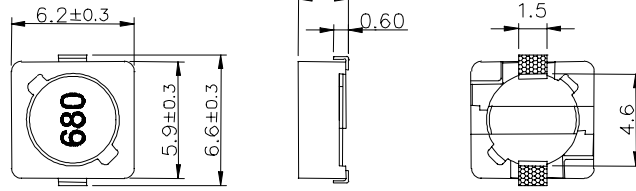


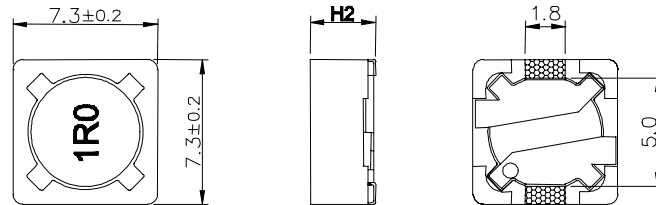
Shielded SMD Power Inductor—PCS



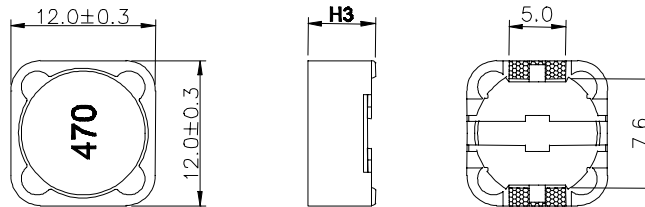
PCS62B / 64B



PCS73 / 74



PCS124 / 125 / 127



Features

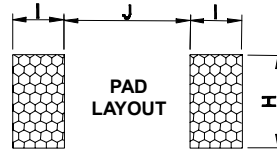
- High power, High saturation inductors
- With magnetically shielded against radiation
- Directly connected electrode on ferrite core
- Highly accurate dimensions for surface mounting

Applications

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

Characteristics except PCSH127

- 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: $-40\sim 85^{\circ}\text{C}$



Characteristics for PCSH127

- Rated DC Current: The DC current at which the inductance becomes 30% lower than its initial value. ($T_a=25^{\circ}\text{C}$)
- Operating temperature range: $-40\sim 105^{\circ}\text{C}$

Inductance and rated current ranges

- PCS62B 2.9 $\mu\text{H}\sim 330\mu\text{H}$ 1.94 $\sim 0.19\text{A}$
- PCS64B 10 $\mu\text{H}\sim 1000\mu\text{H}$ 1.35 $\sim 0.14\text{A}$
- PCS73 1.0 $\mu\text{H}\sim 1000\mu\text{H}$ 7.97 $\sim 0.16\text{A}$
- PCS74 1.0 $\mu\text{H}\sim 1000\mu\text{H}$ 8.0 $\sim 0.18\text{A}$
- PCS124 2.5 $\mu\text{H}\sim 330\mu\text{H}$ 8.0 $\sim 0.5\text{A}$
- PCS125 1.3 $\mu\text{H}\sim 1000\mu\text{H}$ 8.0 $\sim 0.4\text{A}$
- PCS127 1.2 $\mu\text{H}\sim 1000\mu\text{H}$ 9.8 $\sim 0.55\text{A}$
- PCS127H 4.7 $\mu\text{H}\sim 1000\mu\text{H}$ 15.9 $\sim 1.14\text{A}$
- Electrical specifications at 25°C

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
PCSH127	-	-	8.0	5.4	2.9	7.0

Product Identification

PCS	62B	M	T	101
Product Type	Dimensions (AxBxC)	Inductor Tolerance	Packaging Style	Inductance
PCS: Standard PCSH: High Current	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: ±20% P: +40%-20%	T: Tape and Reel	1R1: 1.1μH 470: 47μH 101: 100μH

Electrical Characteristics

PCS62B / 64B / 73 / 74 Type

Codes	L (μH)	Tolerance	RDC (Ω) max.				IDC (A) max.			
			62B	64B	73	74	62B	64B	73	74
1R0	1.0	M	-	-	0.016	0.020	-	-	7.970	8.000
1R5	1.5	M	-	-	0.023	0.018	-	-	5.500	7.000
2R2	2.2	M	-	-	0.027	0.028	-	-	4.500	6.000
2R9	2.9	M	0.070	-	-	-	1.940	-	-	-
3R3	3.3	M	0.075	-	0.031	0.032	1.800	-	4.000	4.800
3R9	3.9	M	-	-	0.041	0.035	-	-	3.800	4.400
4R0	4.0	M	0.080	-	-	-	1.630	-	-	-
4R7	4.7	M	0.090	-	0.048	0.038	1.55	-	3.500	4.000
5R5	5.5	M	0.100	-	-	-	1.400	-	-	-
5R6	5.6	M	-	-	0.056	0.040	-	-	3.000	3.500
6R8	6.8	M	-	-	0.062	0.045	-	-	2.000	3.000
100	10	M	0.150	0.120	0.072	0.049	1.100	1.350	1.680	1.840
120	12	M	0.200	0.130	0.098	0.058	1.000	1.220	1.520	1.710
150	15	M	0.230	0.180	0.130	0.081	0.900	1.110	1.330	1.470
180	18	M	0.270	0.240	0.140	0.091	0.800	1.020	1.200	1.310
220	22	M	0.340	0.270	0.190	0.110	0.740	0.910	1.070	1.230
270	27	M	0.380	0.300	0.210	0.150	0.660	0.820	0.960	1.120
330	33	M	0.450	0.330	0.240	0.170	0.590	0.740	0.910	0.960
390	39	M	0.490	0.370	0.320	0.230	0.540	0.690	0.770	0.910
470	47	M	0.690	0.520	0.360	0.260	0.500	0.620	0.760	0.880
560	56	M	0.780	0.560	0.470	0.350	0.460	0.580	0.680	0.750
680	68	M	1.070	0.630	0.520	0.380	0.420	0.510	0.610	0.690
820	82	M	1.210	0.710	0.690	0.430	0.380	0.460	0.570	0.610
101	100	M	1.390	1.030	0.790	0.610	0.340	0.420	0.500	0.600
121	120	M	1.900	1.150	0.890	0.660	0.310	0.380	0.490	0.520
151	150	M	2.180	1.680	1.270	0.880	0.280	0.350	0.430	0.460
181	180	M	2.770	1.870	1.450	0.980	0.260	0.320	0.390	0.420
221	220	M	3.120	2.080	1.650	1.170	0.230	0.290	0.350	0.360
271	270	M	4.380	2.370	2.310	1.640	0.220	0.260	0.320	0.340
331	330	M	4.940	2.670	2.620	1.860	0.190	0.230	0.280	0.320
391	390	M	-	2.940	2.940	2.850	-	0.220	0.260	0.290
471	470	M	-	3.930	4.180	3.010	-	0.200	0.240	0.260
561	560	M	-	5.430	4.670	3.620	-	0.180	0.220	0.230
681	680	M	-	7.320	5.730	4.630	-	0.170	0.190	0.220
821	820	M	-	8.240	6.540	5.200	-	0.150	0.180	0.200
102	1000	M	-	9.260	9.440	6.000	-	0.140	0.160	0.180

Measuring Freq:

PCS62B: 2.9~5.5μH @100KHz 0.25V; 10~330μH @1KHz 0.25V
 PCS64B: 10~1000μH @1KHz 0.25V
 PCS73: 6.8~1000μH @1KHz 0.25V
 PCS74: 1.0~1000μH @1KHz 0.25V

■ Electrical Characteristics

PCS124 / 125 / 127 Type

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

■ Measuring Freq:

PCS124: 2.5~330 μH @100KHz 0.25V

PCS125: 1.3~7.5 μH @7.96MHz 0.25V; 10~1000 μH @1KHz 0.25V

PCS127: 1.2~7.6 μH @100KHz 0.25V; 10~1000 μH @1KHz 0.25V

■ High Current Electrical Characteristics

PCSH127 Type

Codes	L (μH)	Tolerance	DCR (Ω) max.	IDC (A) max.
4R7	4.7	M	0.016	15.9
6R8	6.8	M	0.021	13.3
8R2	8.2	M	0.023	12.2
100	10	M	0.024	11.2
150	15	M	0.031	9.00
220	22	M	0.040	7.57
330	33	M	0.070	6.22
470	47	M	0.080	5.28
680	68	M	0.105	4.26
820	82	M	0.143	3.80
101	100	M	0.163	3.52
151	150	M	0.247	3.01
221	220	M	0.376	2.36
331	330	M	0.574	2.00
471	470	M	0.861	1.64
681	680	M	1.080	1.38
821	820	M	1.470	1.26
102	1000	M	1.660	1.14

■ Measuring Freq:

PCSH127: 4.7~1000μH @100KHz 0.25V