3. SSPB Series (Unshielded Type)

Applications

- Portable telephones.
- Personal computers.
- DC/DC converters, etc.
- Other various electronic appliances.

Features

- High power, high saturation inductors.
- SSPB1608 series used ceramic base with gold-plating.
- The others used LCP plastic base.
- Ideal inductor for DC-DC conversion in notebook computer, Step-up or Step-down converters, etc.

Inductance and Rated Current ranges

Part Series	Inductances range	Rated Current range
* SSPB1608	1.0~1000µH	2.9~0.07A (Irms) ; 2.9~0.10A (Isat)
* SSPB1813	0.18~100µH	10.0~0.47A (Irms) ; 14.0~0.53A (Isat)
* SSPB3308	10~1000µH	2.0~0.05A (Irms) ; 2.4~0.10A (Isat)
* SSPB3316	1.0~1000µH	6.8~0.30A (Irms) ; 9.0~0.30A (Isat)
* SSPB3340	10~1000µH	3.5~0.10A (Irms) ; 8.0~0.80A (Isat)
* SSPB5022	1.0~1000µH	8.6~0.56A (Irms) ; 20.0~1.00A (Isat)

(Dimension data (Refer to Fig. 1))

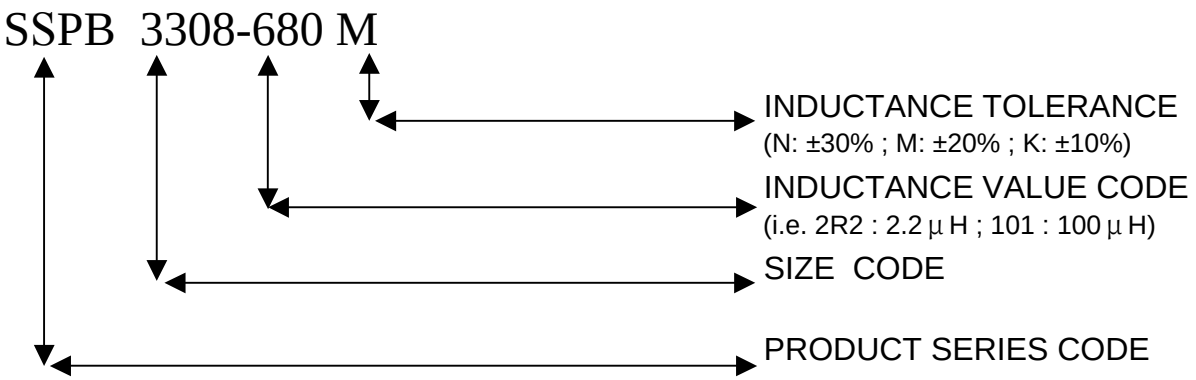
Characteristics

- Saturation Rated current (I sat): The current when the inductance becomes 10% lower than its initial value. (Ta=25 ℃)
- Temperature Rise Current (I rms): The actual current when temperature of coil becomes △40℃. (Ta=25℃)
- Operating temperature range: -40℃~+85℃
- Test equipment:

  L: HP4284A LCR meter @100KHz 0.1V
  DCR Resistance: Milli-ohm meter or equivalent.
  SRF: HP4291B RF Impedance Analyzer.
  Electrical Specifications at 25℃.

3. SSPB Series (Unshielded Type)

Part Numbering System



Dimensions (mm)

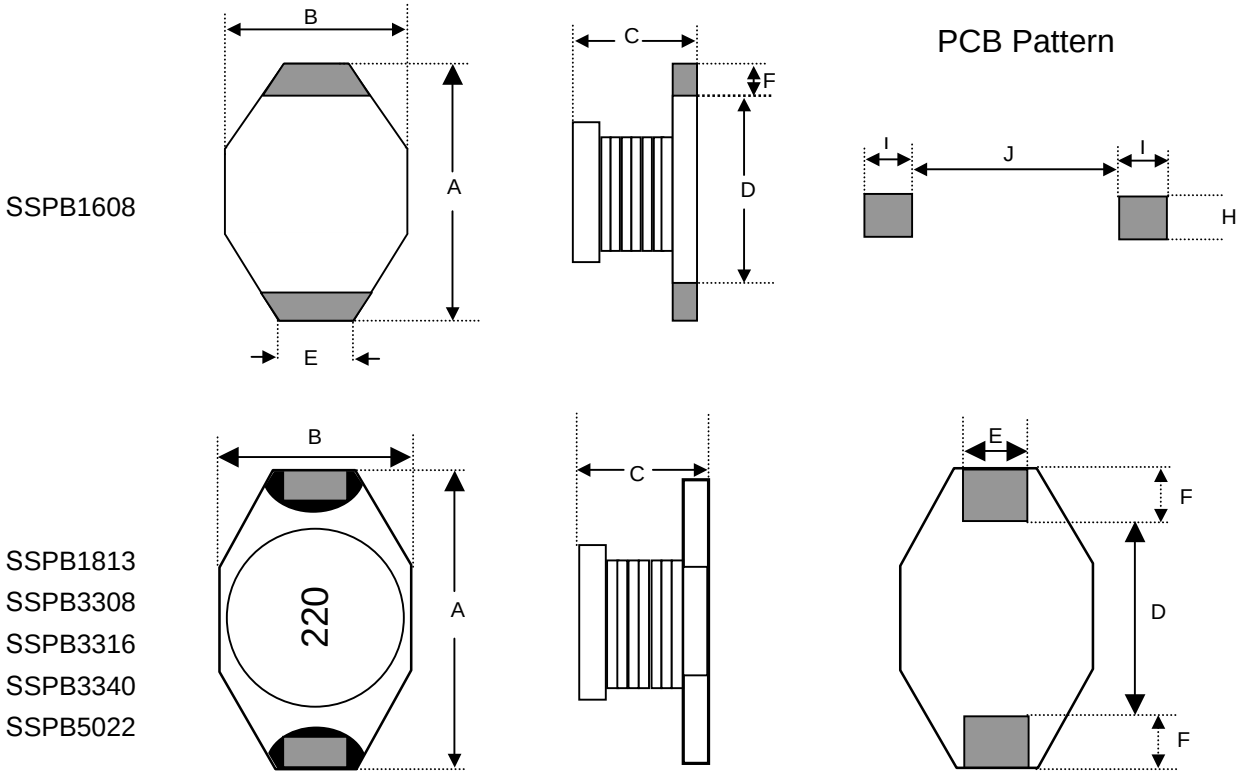


Fig. 1

Series	A max	B max	C max	D	E	F	H	I	J
SSPB1608	6.60	4.45	2.92	4.32	1.27	1.02	3.56	1.40	4.06
SSPB1813	8.89	6.10	4.70	5.00	2.00	1.50	3.50	2.20	4.80
SSPB3308	12.95	9.40	3.00	7.62	2.54	2.54	2.79	2.92	7.37
SSPB3316	12.95	9.40	5.21	7.62	2.54	2.54	2.79	2.92	7.37
SSPB3340	12.95	9.40	11.43	7.62	2.54	2.54	2.79	2.92	7.37
SSPB5022	18.54	15.24	7.11	12.70	2.54	2.54	2.79	2.92	12.45

3. SSPB Series (Unshielded Type)

Electrical Characteristics

SSPB 1608 / 1813 / 3308 TYPE

Inductance value code	L (µH)	Tol.	DC Resistance (Ω) Max.			Rated DC current (A) Max.					
						I rms			I sat		
			1608	1813	3308	1608	1813	3308	1608	1813	3308
R18	0.18	N	-	0.007	-	-	10.00	-	-	14.00	-
R33	0.33	N	-	0.008	-	-	7.00	-	-	10.00	-
R56	0.56	N	-	0.010	-	-	6.00	-	-	7.70	-
1R0	1.0	M	0.050	-	-	2.90	-	-	2.90	-	-
1R2	1.2	N	-	0.017	-	-	4.40	-	-	5.30	-
1R5	1.5	M	0.050	-	-	2.80	-	-	2.60	-	-
2R2	2.2	M*	0.070	0.035	-	2.40	3.10	-	2.30	3.50	-
3R3	3.3	M*	0.080	0.040	-	2.00	2.70	-	2.00	3.00	-
4R7	4.7	M*	0.090	0.064	-	1.50	2.20	-	1.50	2.60	-
6R8	6.8	M*	0.130	0.080	-	1.40	1.80	-	1.20	2.20	-
100	10	M	0.160	0.111	0.085	1.10	1.50	2.00	1.10	1.90	2.40
150	15	M	0.230	0.170	0.120	1.20	1.20	1.50	0.90	1.50	2.00
220	22	M	0.370	0.250	0.180	0.80	1.00	1.30	0.70	1.20	1.60
330	33	M	0.510	0.350	0.250	0.60	0.82	1.10	0.58	0.99	1.40
470	47	M	0.640	0.470	0.320	0.50	0.72	0.80	0.50	0.87	1.00
680	68	M	0.860	0.730	0.540	0.40	0.56	0.70	0.40	0.67	0.90
101	100	M	1.270	1.110	0.690	0.30	0.47	0.60	0.31	0.53	0.70
151	150	M	2.000	-	0.940	0.25	-	0.50	0.27	-	0.60
221	220	M	3.110	-	1.600	0.20	-	0.40	0.22	-	0.50
331	330	M	3.800	-	2.150	0.16	-	0.30	0.18	-	0.40
471	470	M	6.200	-	3.300	0.15	-	0.20	0.16	-	0.30
681	680	M	9.200	-	4.400	0.12	-	0.10	0.14	-	0.20
102	1000	M	13.80	-	7.000	0.07	-	0.05	0.10	-	0.10

Tolerance of Inductance:

1. SSPB1813 : *2.2µH~6.8µH; (N)±30%.

3. SSPB Series (Unshielded Type)

Electrical Characteristics

SSPB 3316 / 3340 / 5022 TYPE

Inductance value code	L (µH)	Tol.	DC Resistance (Ω) Max.			Rated DC current (A) Max.					
						I rms			I sat		
			3316	3340	5022	3316	3340	5022	3316	3340	5022
1R0	1.0	M	0.009	-	0.009	6.80	-	8.60	9.00	-	20.00
1R5	1.5	M	0.010	-	-	6.40	-	-	8.00	-	-
2R2	2.2	M	0.012	-	0.014	6.10	-	7.10	7.00	-	16.00
3R3	3.3	M	0.015	-	0.018	5.40	-	6.20	6.40	-	14.00
4R7	4.7	M	0.018	-	-	4.80	-		5.40	-	-
5R6	5.6	M	-	-	0.020	-	-	5.30	-	-	12.00
6R8	6.8	M	0.027	-	-	4.40	-	-	4.60	-	-
100	10	M	0.038	0.040	0.031	3.90	3.50	4.30	3.80	8.00	10.00
150	15	M	0.046	0.050	0.036	3.10	3.00	4.00	3.00	7.00	8.00
220	22	M	0.085	0.066	0.047	2.70	2.50	3.50	2.60	5.50	7.00
330	33	M	0.100	0.080	0.066	2.10	2.00	3.00	2.00	4.00	5.50
470	47	M	0.140	0.110	0.095	1.80	1.60	2.60	1.60	3.80	4.50
680	68	M	0.200	0.170	0.130	1.50	1.20	2.30	1.40	3.00	3.50
101	100	M	0.280	0.220	0.190	1.30	1.20	1.80	1.20	2.50	3.00
151	150	M	0.400	0.340	0.250	1.00	0.90	1.50	1.00	2.00	2.60
221	220	M	0.610	0.440	0.380	0.80	0.70	1.20	0.80	1.60	2.40
331	330	M	1.020	0.700	0.560	0.60	0.60	1.00	0.60	1.20	1.90
471	470	M	1.270	0.950	0.850	0.50	0.30	0.82	0.50	1.00	1.40
681	680	M	2.020	1.200	1.100	0.40	0.20	0.72	0.40	1.00	1.20
102	1000	M	3.000	2.000	1.800	0.30	0.10	0.56	0.30	0.80	1.00