

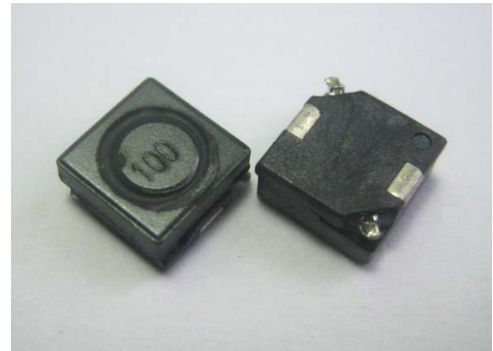
5. SPS Series (Shielded Type)

Applications

- GPS receiver module.
- Smart Home Systems.
- Other various electronic appliances.

Features

- Available in magnetically shielded.
- SPS1608 used ceramic base with gold-plating.
- SPS3316 / 5022 designed for the higher current requirements of portable computers.



Inductance and Rated Current ranges

Part Series	Inductances range	Rated Current range
* SPS1608	1.0~10000 μ H	3.00~0.02A (Irms) ; 1.40~0.02A (Isat)
* SPS3316	1.0~1000 μ H	5.80~0.35A (Irms) ; 5.60~0.32A (Isat)
* SPS5022	1.0~1000 μ H	20.00~0.90A (Irms) ; 20.00~0.80A (Isat)

(Dimension data (Refer to Fig. 1))

Part Series	Inductances range	Rated Current range
* SPS0804	5.0~470 μ H	1.70~0.16A
* SPS0805	2.2~1000 μ H	2.50~0.15A
* SPS1005	1.0~3300 μ H	5.80~0.18A

(Dimension data (Refer to Fig. 2))

Part Series	Inductances range	Rated Current range
* SPS0603	1.5~1000 μ H	2.20~0.10A
* SPS0604	1.5~1000 μ H	2.80~0.12A

(Dimension data (Refer to Fig. 3))

Part Series	Inductances range	Rated Current range
* SPS6028	1.0~1000 μ H	3.80~0.11A (Irms) ; 3.00~0.09A (Isat)
* SPS6038	1.0~1000 μ H	3.70~0.14A (Irms) ; 4.00~0.13A (Isat)
* SPS7032	3.3~1000 μ H	2.40~0.15A (Irms) ; 2.20~0.14A (Isat)
* SPS7045	1.0~680 μ H	5.20~0.40A (Irms) ; 6.00~0.20A (Isat)

(Dimension data (Refer to Fig. 4))

Part Series	Inductances range	Rated Current range
* SPS1205	2.5~820 μ H	5.00~0.30A
* SPS1206	2.5~1500 μ H	6.20~0.20A
* SPS1208	2.5~1500 μ H	7.80~0.36A

(Dimension data (Refer to Fig. 5))

Part Series	Inductances range	Rated Current range
* SPS1240	1.0~1000 μ H	9.30~0.42A (Irms) ; 9.20~0.40A (Isat)
* SPS1260	1.0~1000 μ H	9.40~0.68A (Irms) ; 10.00~0.60A (Isat)
* SPS1280	1.1~1000 μ H	10.20~0.68A (Irms) ; 14.00~0.80A (Isat)

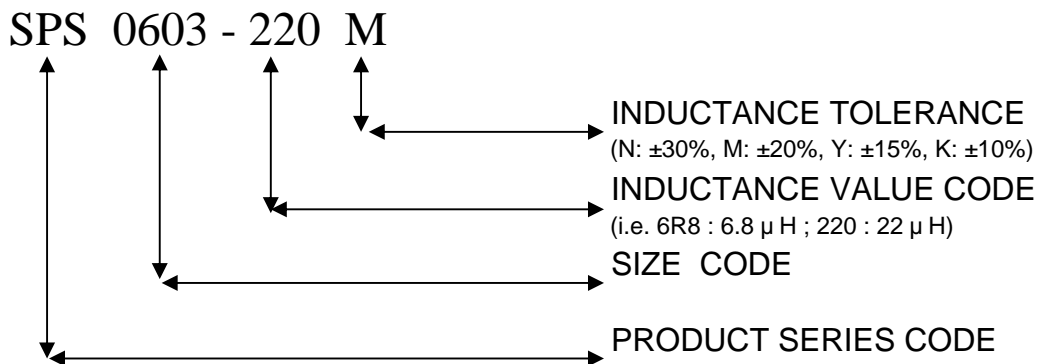
(Dimension data (Refer to Fig. 6))

5. SPS Series (Shielded Type)

Characteristics

Test Frequency : 1KHz
 a). SPS1240, SPS1608, SPS3316, SPS5022: @100KHz 0.1V
 b). SPS1260: 1.0μH~8.2μH @100KHz 0.1V, 10μH~1000μH@1KHz 1V
 c). SPS1280: 1.1μH~8.2μH @100KHz 1V, 10μH~1000μH@1KHz 1V
 Operating temperature range : -40 ~+125 .
 Test equipment :
 L: HP4284A LCR meter or equivalent.
 DCR: Milli-ohm meter or equivalent.
 Electrical specifications at 25 .

Part Numbering System



Dimensions (mm)

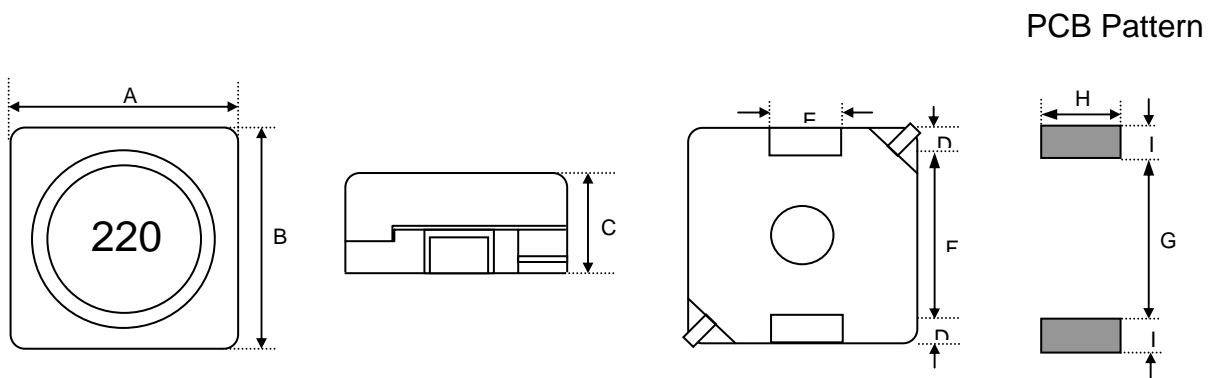


Fig. 3

Series	A	B	C	D	E	F (typ.)	G (ref.)	H (ref.)	I (ref.)
SPS0603	6.50±0.30	6.50±0.30	3.10±0.30	0.80 +0.20 - 0.30	1.85±0.20	5.00	4.30	2.50	1.50
SPS0604	6.50±0.30	6.50±0.30	4.60±0.30	0.80 +0.20 - 0.30	1.85±0.20	5.00	4.30	2.50	1.50

5. SPS Series (Shielded Type)

Electrical Characteristics

SPS 0603 / 0604 TYPE

Inductance value code	L (μH)	Tol.	DC Resistance () Max.		Rated DC current (A) Max.	
			0603	0604	0603	0604
1R5	1.5	M	0.032	0.028	2.20	2.80
2R5	2.5	M	0.040	0.035	2.00	2.50
3R3	3.3	M	0.055	0.050	1.80	2.30
4R7	4.7	M	0.070	0.060	1.60	2.00
6R8	6.8	M	0.100	0.070	1.20	1.60
100	10	M	0.120	0.120	1.10	1.30
150	15	M	0.180	0.130	0.90	1.10
220	22	M	0.270	0.190	0.70	0.90
330	33	K	0.430	0.250	0.60	0.70
470	47	K	0.550	0.360	0.50	0.60
680	68	K	0.900	0.520	0.40	0.50
101	100	K	1.500	0.650	0.30	0.40
151	150	K	1.900	1.000	0.25	0.30
221	220	K	2.700	1.700	0.20	0.25
331	330	K	4.200	2.100	0.18	0.20
471	470	K	6.700	3.300	0.15	0.18
681	680	K	10.500	4.800	0.12	0.15
102	1000	K	14.000	6.100	0.10	0.12

1. Test Frequency: 1 KHz

2a). Irms: base on temp. rise 40 °C Max.

2b). Isat: base on L/L0A = 10% Max.

3. Operating temperature range : -40 °C ~ +125 °C .