

SMD Power Chokes, SSL Series



SSL - 0402 Series

PART NO.	Inductance (μ H) $\pm 20\%$	SRF (MHz)	RDC (Ω) MAX.	I sat (A)	Irms (A)
SSL-0402-1R0 M	1.0	130	0.05	2.90	2.90
SSL-0402-1R5 M	1.5	115	0.05	2.60	2.80
SSL-0402-2R2 M	2.2	90	0.07	2.30	2.4
SSL-0402-3R3 M	3.3	70	0.08	2.00	2.0
SSL-0402-4R7 M	4.7	50	0.09	1.50	1.5
SSL-0402-6R8 M	6.8	45	0.13	1.20	1.4
SSL-0402-100 M	10	35	0.16	1.10	1.1
SSL-0402-150 M	15	30	0.23	0.90	1.0
SSL-0402-220 M	22	20	0.37	0.70	0.8
SSL-0402-330 M	33	15	0.51	0.58	0.6
SSL-0402-470 M	47	14	0.64	0.50	0.5
SSL-0402-680 M	68	11	0.86	0.40	0.4
SSL-0402-101 M	100	9	1.27	0.31	0.3
SSL-0402-151 M	150	6	2.00	0.27	0.25
SSL-0402-221 M	220	5.5	2.65	0.22	0.2
SSL-0402-331 M	330	5	3.80	0.18	0.16
SSL-0402-471 M	470	4	5.06	0.16	0.15
SSL-0402-681 M	680	3	9.20	0.14	0.12
SSL-0402-102 M	1000	2	13.8	0.10	0.07

M = $\pm 20\%$, K = $\pm 10\%$, J = $\pm 5\%$

- # Tested at 100 KHz, 0.1 Vrms
- # Inductance drop = 10% Typical at rated Isat
- # $\Delta T = 30^\circ\text{C}$ Typical at Irms
- # Operating Temperature range -40°C to $+85^\circ\text{C}$

SMD Power Chokes, SSL Series



SSL - 0802 Series

Part Number	Inductance at 100kHz 0.1Vrms ($\mu\text{H} \pm 20\%$)	DC Resistance ($\Omega \pm 15\%$)	I sat ² (Amps) Inductance drop = 10%
SSL-0802-100M	10	0.09	2.4
SSL-0802-150M	15	0.12	2.0
SSL-0802-220M	22	0.19	1.6
SSL-0802-330M	33	0.25	1.4
SSL-0802-470M	47	0.32	1.0
SSL-0802-680M	68	0.55	0.9
SSL-0802-101M	100	0.70	0.7
SSL-0802-151M	150	1.0	0.6
SSL-0802-221M	220	1.6	0.5
SSL-0802-331M	330	2.2	0.4
SSL-0802-471M	470	3.3	0.3
SSL-0802-681M	680	4.4	0.2
SSL-0802-102M	1000	7.0	0.1

M = $\pm 20\%$, K = $\pm 10\%$, J = $\pm 5\%$

- # Tested at 100 KHz, 0.1 Vrms
- # Inductance drop = 10% Typical at rated Isat
- # $\Delta T = 30^\circ\text{C}$ Typical at Irms
- # Operating Temperature range -40°C to $+85^\circ\text{C}$

SMD Power Chokes, SSL Series



SSL- 0804 Series

Part Number	Inductance at 100kHz 0.1Vrms ($\mu\text{H} \pm 20\%$)	DC Resistance ($\Omega \pm 15\%$)	I sat ² (Amps) Inductance drop = 10%
SSL-0804-1R0M	1.0	0.008	9.0
SSL-0804-1R5M	1.5	0.009	8.0
SSL-0804-2R2M	2.2	0.010	7.0
SSL-0804-3R3M	3.3	0.013	6.4
SSL-0804-4R7M	4.7	0.016	5.4
SSL-0804-6R8M	6.8	0.019	4.6
SSL-0804-100M	10	0.025	3.8
SSL-0804-150M	15	0.040	3.0
SSL-0804-220M	22	0.050	2.6
SSL-0804-330M	33	0.088	2.0
SSL-0804-470M	47	0.12	1.6
SSL-0804-680M	68	0.16	1.4
SSL-0804-101M	100	0.23	1.2
SSL-0804-151M	150	0.33	1.0
SSL-0804-221M	220	0.53	0.8
SSL-0804-331M	330	0.81	0.6
SSL-0804-471M	470	1.10	0.5
SSL-0804-681M	680	1.60	0.4
SSL-0804-102M	1000	2.15	0.3

M = $\pm 20\%$, K = $\pm 10\%$, J = $\pm 5\%$

- # Tested at 100 KHz, 0.1 Vrms
- # Inductance drop = 10% Typical at rated Isat
- # $\Delta T = 30^\circ\text{C}$ Typical at Irms
- # Operating Temperature range -40°C to $+85^\circ\text{C}$

SMD Power Chokes, SSL Series



SSL - 0810 Series

Part Number	Inductance ($\mu\text{H} \pm 20\%$)	DC Resistance (Ω max)	I sat ² (Amps)
SSL-0810-100M	10	0.033	8.0
SSL-0810-150M	15	0.042	7.0
SSL-0810-220M	22	0.054	5.5
SSL-0810-330M	33	0.080	4.0
SSL-0810-470M	47	0.10	3.8
SSL-0810-680M	68	0.17	3.0
SSL-0810-101M	100	0.22	2.5
SSL-0810-151M	150	0.34	2.0
SSL-0810-221M	220	0.44	1.6
SSL-0810-331M	330	0.70	1.2
SSL-0810-471M	470	0.95	1.0
SSL-0810-681M	680	1.20	1.0
SSL-0810-102M	1000	2.00	0.8

M = $\pm 20\%$, K = $\pm 10\%$, J = $\pm 5\%$

- # Tested at 100 KHz, 0.1 Vrms
- # Inductance drop = 10% Typical at rated Isat
- # $\Delta T = 30^\circ\text{C}$ Typical at Irms
- # Operating Temperature range -40°C to $+85^\circ$

SMD Power Chokes, SSL Series



SSL - 1306 Series

Part Number	Inductance ($\mu\text{H} \pm 20\%$)	DC Resistance ($\Omega \pm 15\%$)	I sat ² (Amps)	I rms ³ (Amps)
SSL-1306-1R0M	1.0	0.011	20	8.6
SSL-1306-2R2M	2.2	0.014	16	7.1
SSL-1306-3R3M	3.3	0.016	14	6.2
SSL-1306-5R6M	5.6	0.022	12	5.3
SSL-1306-100M	10	0.032	10	4.3
SSL-1306-150M	15	0.036	8.0	4.0
SSL-1306-220M	22	0.047	7.0	3.5
SSL-1306-330M	33	0.066	5.5	3.0
SSL-1306-470M	47	0.089	4.5	2.6
SSL-1306-680M	68	0.130	3.5	2.3
SSL-1306-101M	100	0.190	3.0	1.8
SSL-1306-151M	150	0.250	2.6	1.5
SSL-1306-221M	220	0.380	2.4	1.2
SSL-1306-331M	330	0.560	1.9	1.0
SSL-1306-471M	470	0.850	1.4	0.82
SSL-1306-681M	680	1.200	1.2	0.72
SSL-1306-102M	1000	1.800	1.0	0.56

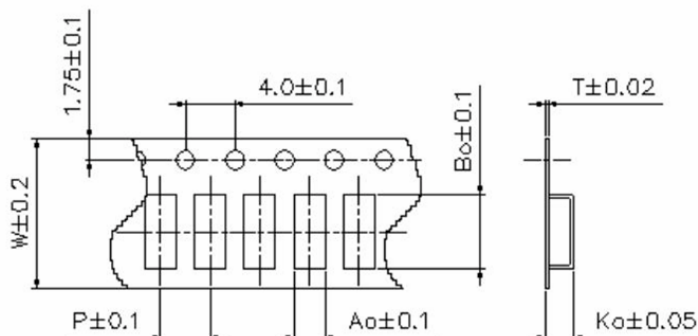
M = $\pm 20\%$, K = $\pm 10\%$, J = $\pm 5\%$

- # Tested at 100 KHz, 0.1 Vrms
- # Inductance drop = 10% Typical at rated Isat
- # $\Delta T = 30^\circ\text{C}$ Typical at Irms
- # Operating Temperature range -40°C to $+85^\circ$

SMD Power Chokes, SSL Series



Dimensions of Taping:



Series	W	P	A0	B0	K0	T	Quantity	
							7" Reel	13" Reel
SSL - 0402	12	8	4.8	6.9	3.0	0.25	750	2000
SSL - 0802	24	12	9.7	13.25	3.3	0.3		1000
SSL - 0804	24	12	9.7	13.25	5.4	0.3		500
SSL - 0810	24	12	9.7	13.25	11.7	0.3		225
SSL - 1306	32	20	15.4	18.8	8	0.4		250



Reliability Test (Environmental Performances):

No.	Item	Specification	Test Condition															
1.	Temperature Cycle	Appearance No damage Impedance within $\pm 20\%$ Of the initial value	<p>One Cycle</p> <table border="1"> <thead> <tr> <th>Step</th> <th>Temperate</th> <th>Time (min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-55°C</td> <td>30</td> </tr> <tr> <td>2</td> <td>25°C</td> <td>3</td> </tr> <tr> <td>3</td> <td>125°C</td> <td>30</td> </tr> <tr> <td>4</td> <td>25°C</td> <td>3</td> </tr> </tbody> </table> <p>Total 100 Cycles Measured after exposure in room condition = 24hrs</p>	Step	Temperate	Time (min)	1	-55°C	30	2	25°C	3	3	125°C	30	4	25°C	3
Step	Temperate	Time (min)																
1	-55°C	30																
2	25°C	3																
3	125°C	30																
4	25°C	3																
2	Humidity Resistance		<p>Temperature: $+40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ Humidity: 90% to 95% Time 1000 \pm 12 Hours Measured after exposure in room condition = 24hrs</p>															
3	High Temperature Resistance		<p>Temperature = $125^{\circ}\text{C} \pm 3^{\circ}\text{C}$ Relative Humidity = 0% Applied Current = Rated Current as state Time = 1000 hrs \pm 12 hrs Measure after exposure in room Condition = 24hrs</p>															
4.	Temperature Shock		<p>10 cycles (air to Air) (1 cycles shall consist of) 30 minutes exposure to -55°C 30 minutes exposure to 125°C 15 seconds maximum transition between temperatures Measure after exposure in room Condition = 24hrs</p>															

SMD Power Chokes, SSL Series



Reliability Test (Mechanical Performances):

No.	Item	Specification	Test Condition
1.	Solderability	More than 90% of the terminal Electrode shall be covered with fresh solder	Pre heat = 150°C Pre heat Time = 1 minute Solder = Sn/Ag3.0/Cu0.5 (Pb –Free) Solder Temperature = 245°C ± 5°C Immersion Time = 4 ± 1 Sec
2.	Resistance to Soldering Heat	The chips shall not crack. More than 75% of the terminal Electrode Shall be cover with solder	Pre Heat = 150°C Pre heat Time = 1 minute Solder = Sn/Ag3.0/Cu0.5 (Pb –Free) Solder Temperature = 260°C ± 5°C Immersion Time = 10 ± 1 Sec
3.	Vibration		Test Device shall be soldered on the substrate Oscillation Freq.= 10 to 55 to 10Hz for 1 min Amplitude = 1.5mm Time = 2hrs for each axis (X,Y&Z) total 6 hrs