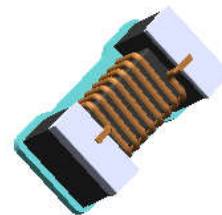


FEATURES

- Small chip suitable for surface mounting
- High Q value and high self-resonant frequency with Ferrite material
- Tight inductance tolerance and high reliability
- Operate temperature range $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ (Including self temp. rise)
- RoHS compliant



APPLICATIONS

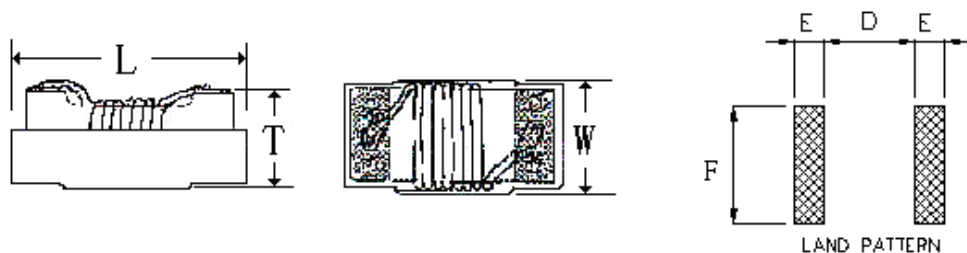
- Mobile phones and other electronic devices
- Bluetooth modules and TWS earphones

PRODUCT IDENTIFICATION

SLQW 1608 F 1R0 K T

① ② ③ ④ ⑤ ⑥

- ① Product Series: Wire Wound Chip Ferrite Inductors
- ② Dimensions:
- ③ Material Code : Ceramic
- ④ Nominal Inductance: 1R0 ==> 1.0uH
- ⑤ Inductance Tolerance: J $\pm$ 5%, K $\pm$ 10%, M $\pm$ 20%
- ⑥ Packing : Tape & Reel

Dimensions: [mm]

Series	L(Max)	W(Max)	T(Max)	E(Typ.)	F(Typ.)	D(Typ.)
SLQW1005F	1.19	0.70	0.64	0.36	0.66	0.46
SLQW1608F	1.80	1.12	0.95	0.64	1.02	0.64
SLQW2012F	2.29	1.73	1.52	1.02	1.78	0.76
SLQW2520F	2.92	2.70	2.23	1.02	2.54	1.27
SLQW3225F	3.50	2.90	2.25	1.02	2.54	1.78
SLQW4532F	4.95	3.85	3.43	1.14	3.05	3.00

Electrical Characteristics List**SLQW1005F Series**

NO.	Part Number	L (nH)	Freq (MHz)	SRF (MHz)Min	Rdc (Ω) Max	Isat (mA) Max
1	SLQW1005F78NKT	78	7.9	1600	0.13	970
2	SLQW1005FR10KT	100	7.9	1400	0.16	900
3	SLQW1005FR11KT	110	7.9	1000	0.2	850
4	SLQW1005FR12KT	120	7.9	1000	0.2	850
5	SLQW1005FR14KT	140	7.9	1220	0.26	630
6	SLQW1005FR15KT	150	7.9	1220	0.26	630
7	SLQW1005FR18KT	180	7.9	1150	0.28	560
8	SLQW1005FR20KT	200	7.9	1000	0.44	400
9	SLQW1005FR22KT	220	7.9	1150	0.53	380
10	SLQW1005FR25KT	250	7.9	900	0.9	360
11	SLQW1005FR27KT	270	7.9	860	0.9	360
12	SLQW1005FR30KT	300	7.9	860	0.9	360
13	SLQW1005FR36KT	360	7.9	810	0.9	250
14	SLQW1005FR39KT	390	7.9	760	1	200
15	SLQW1005FR47KT	470	7.9	650	1	200
16	SLQW1005FR56KT	560	7.9	600	1.2	200
17	SLQW1005FR82KT	820	7.9	385	5.85	90
18	SLQW1005F1R0KT	1000	7.9	200	6.5	50

SLQW1608F Series

NO.	Part Number	L	L/Q Freq	Q	SRF	Rdc	Irms
		(μ H)	(MHz)	(Min)	(MHz)Typ	(Ω)max	(mA)Typ
1	SLQW1608FR12KT	0.12	7.9	12	1000	0.15	1000
2	SLQW1608FR18KT	0.18	7.9	12	950	0.2	1000
3	SLQW1608FR22KT	0.22	7.9	12	775	0.3	700
4	SLQW1608FR27KT	0.27	7.9	12	775	0.3	700
5	SLQW1608FR33KT	0.33	7.9	12	725	0.32	600
6	SLQW1608FR39KT	0.39	7.9	12	620	0.51	500
7	SLQW1608FR47KT	0.47	7.9	12	540	0.43	570
8	SLQW1608FR56KT	0.56	7.9	12	600	0.65	400
9	SLQW1608FR68KT	0.68	7.9	12	500	1	380
10	SLQW1608FR82KT	0.82	7.9	12	500	1.3	350
11	SLQW1608F1R0KT	1	7.9	12	400	0.81	330
12	SLQW1608F1R2KT	1.2	7.9	12	380	1.7	320
13	SLQW1608F1R5KT	1.5	7.9	12	300	1.3	310
14	SLQW1608F1R8KT	1.8	7.9	12	180	2.2	300
15	SLQW1608F2R2KT	2.2	7.9	12	180	2.3	280
16	SLQW1608F2R7KT	2.7	7.9	12	150	2.6	250
17	SLQW1608F3R3KT	3.3	7.9	12	150	2.9	230
18	SLQW1608F3R9KT	3.9	7.9	12	100	2	200
19	SLQW1608F4R7KT	4.7	7.9	12	100	4	200
20	SLQW1608F5R6KT	5.6	7.9	12	32	2.6	240
21	SLQW1608F6R8KT	6.8	7.9	12	31	3.9	200
22	SLQW1608F8R2KT	8.2	7.9	12	26	4.2	190
23	SLQW1608F100KT	10	2.5	12	25	4.8	180
24	SLQW1608F150KT	15	2.5	10	23	8.5	170
25	SLQW1608F220KT	22	2.5	10	10	12	100

SLQW2012F Series

NO.	Part Number	L	Freq	Q	SRF	Rdc	Isat
		(μ H)	(MHz)	(Min)	(MHz)min	(Ω)max	(mA)ma
1	SLQW2012FR12KT	0.12	7.9	19	340	0.27	750
2	SLQW2012FR15KT	0.15	7.9	19	480	0.3	720
3	SLQW2012FR18KT	0.18	7.9	19	480	0.4	720
4	SLQW2012FR22KT	0.22	7.9	19	480	0.4	720
5	SLQW2012FR39KT	0.39	25	19	500	0.31	720
6	SLQW2012FR47KT	0.47	7.9	19	500	0.31	720
7	SLQW2012FR56KT	0.56	7.9	12	400	0.46	400
8	SLQW2012FR68KT	0.68	7.9	19	400	0.46	590
9	SLQW2012FR81KT	0.81	7.9	12	360	1.0	520
10	SLQW2012F1R0KT	1	7.9	12	360	1.0	430
11	SLQW2012F1R2KT	1.2	7.9	12	350	1.15	410
12	SLQW2012F1R5KT	1.5	7.9	12	300	1.2	400
13	SLQW2012F1R8KT	1.8	7.9	12	300	1.35	380
14	SLQW2012F2R2KT	2.2	7.9	12	170	1.5	350
15	SLQW2012F2R7KT	2.7	7.9	12	100	1.7	320
16	SLQW2012F3R3KT	3.3	7.9	12	90	1.8	300
17	SLQW2012F3R9KT	3.9	7.9	12	90	1.95	280
18	SLQW2012F4R7KT	4.7	7.9	12	85	2.05	250
19	SLQW2012F5R6KT	5.6	7.9	12	70	2.3	240
20	SLQW2012F6R8KT	6.8	7.9	12	55	2.6	220
21	SLQW2012F8R2KT	8.2	7.9	12	50	3.0	180
22	SLQW2012F100KT	10	2.5	10	30	2.55	150
23	SLQW2012F120KT	12	2.5	10	16	3.5	100
24	SLQW2012F150KT	15	2.5	10	16	4.2	100
25	SLQW2012F180KT	18	2.5	10	15	4.5	95
26	SLQW2012F220KT	22	2.5	10	14	6.0	80
27	SLQW2012F270KT	27	2.5	10	17	10.7	60
28	SLQW2012F330KT	33	2.5	10	17	10.7	60
29	SLQW2012F470KT	47	2.5	10	14	13.8	55
30	SLQW2012F680KT	68	2.5	8	11	17.5	40
31	SLQW2012F101KT	100	1	8	5	25	30
32	SLQW2012F111KT	110	1	8	5	26	20

SLQW2520F Series

NO.	Part Number	L	Freq	Q	SRF	Rdc	Isat
		(μ H)	(MHz)	(TYP)	(MHz)Min	(Ω) Max	(mA) Max
1	SLQW2520FR39KT	0.39	7.9	12	400	0.40	500
2	SLQW2520FR47KT	0.47	25	12	600	0.27	700
3	SLQW2520FR56KT	0.56	7.9	12	230	0.62	700
4	SLQW2520FR68KT	0.68	7.9	12	230	0.62	700
5	SLQW2520FR82KT	0.82	7.9	12	230	0.62	700
6	SLQW2520FR90KT	0.9	7.9	20	300	0.35	1400
7	SLQW2520F1R0KT	1	7.9	18	230	0.62	700
8	SLQW2520F1R2KT	1.2	7.9	18	210	0.68	650
9	SLQW2520F1R5KT	1.5	7.9	18	190	0.76	630
10	SLQW2520F1R8KT	1.8	7.9	18	170	0.84	600
11	SLQW2520F2R0KT	2	7.9	18	160	1.10	550
12	SLQW2520F2R2KT	2.2	7.9	18	150	1.10	520
13	SLQW2520F2R7KT	2.7	7.9	18	135	1.28	490
14	SLQW2520F3R3KT	3.3	7.9	18	120	1.46	450
15	SLQW2520F3R9KT	3.9	7.9	18	105	2.30	300
16	SLQW2520F4R7KT	4.7	7.9	18	90	2.00	400
17	SLQW2520F5R6KT	5.6	7.9	15	80	1.80	380
18	SLQW2520F6R8KT	6.8	7.9	15	70	2.00	360
19	SLQW2520F8R2KT	8.2	7.9	15	65	2.65	330
20	SLQW2520F100KT	10	2.5	12	60	2.95	300
21	SLQW2520F150KT	15	2.5	12	30	3.70	280
22	SLQW2520F180KT	18	2.5	12	26	4.00	160
23	SLQW2520F220KT	22	2.5	12	22	6.14	270
24	SLQW2520F330KT	33	2.5	10	12	7.00	200
25	SLQW2520F390KT	39	2.5	10	16	10.00	180
26	SLQW2520F470KT	47	2.5	10	10	10.70	160
27	SLQW2520F560KT	56	2.5	10	8	12.00	170
28	SLQW2520F680KT	68	2.5	10	6	13.50	145
29	SLQW2520F820KT	82	2.5	8	6	20.00	100

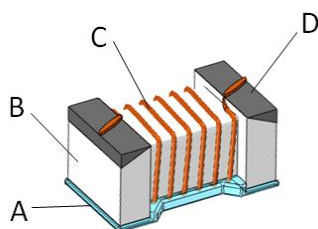
SLQW3225F Series

NO.	Part Number	L	Freq	Q	SRF	Rdc	Irms
		(μ H)	(MHz)	Min	(MHz)Min	(Ω) Max	(mA) Max
1	SLQW3225FR56KT	0.56	25	20	180	0.55	450
2	SLQW3225FR82KT	0.82	7.9	20	200	0.4	450
3	SLQW3225F1R0KT	1	7.9	20	200	0.4	450
4	SLQW3225F1R2KT	1.2	7.9	20	200	0.4	450
5	SLQW3225F1R5KT	1.5	7.9	20	200	0.4	450
6	SLQW3225F1R8KT	1.8	7.9	20	195	0.8	450
7	SLQW3225F2R2KT	2.2	7.9	30	175	0.8	450
8	SLQW3225F3R3KT	3.3	7.9	20	150	1.2	400
9	SLQW3225F4R7KT	4.7	7.9	18	60	1.3	350
10	SLQW3225F5R6KT	5.6	7.9	18	50	2	320
11	SLQW3225F6R8KT	6.8	7.9	18	35	1.5	310
12	SLQW3225F8R2KT	8.2	7.9	15	33	1.6	305
13	SLQW3225F100KT	10	2.5	15	30	1	300
14	SLQW3225F120KT	12	2.5	15	25	1.8	300
15	SLQW3225F150KT	15	2.5	15	22	2	225
16	SLQW3225F180KT	18	2.5	15	22	2.05	215
17	SLQW3225F220KT	22	2.5	15	20	2.4	210
18	SLQW3225F-270KT	27	2.5	15	20	2.8	160
19	SLQW3225F330KT	33	2.5	15	15	2.9	160
20	SLQW3225F470KT	47	2.5	15	10	5.2	140
21	SLQW3225F560KT	56	2.5	8	8	5.6	125
22	SLQW3225F680KT	68	1	6	10	13	100
23	SLQW3225F820KT	82	1	6	10	13	100
24	SLQW3225F101KT	100	1	6	10	13	100
25	SLQW3225F221KT	220	1	8	2.6	30	65
26	SLQW3225F331KT	330	1	8	2.3	35	55
27	SLQW3225F471KT	470	1	8	2	42	40
28	SLQW3225F561KT	560	1	8	3	60	10
29	SLQW3225F621KT	620	1	8	2	85	10
30	SLQW3225F681KT	680	1	6	2	90	10

SLQW4532F Series

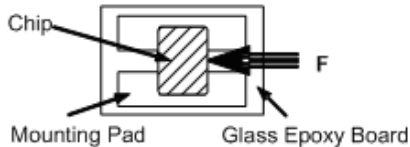
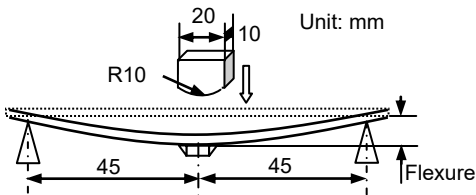
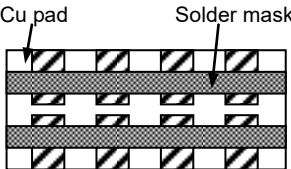
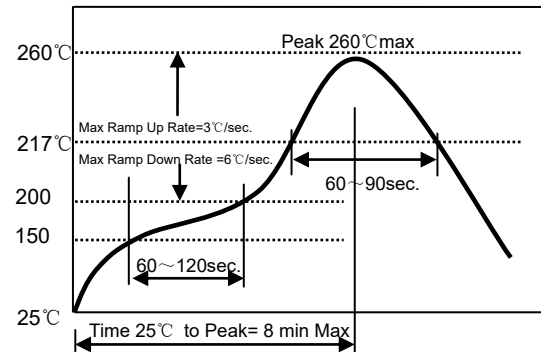
NO.	Part Number	Inductance	Test Freq	Q	SRF	Rdc	Irms	产品公差
		(μ H)	(MHz)	Min	(MHz)Min	(Ω) Max	(mA) Max	
1	SLQW4532F1R0□T	1	7.9	25	250	0.45	600	K,M
2	SLQW4532F2R2□T	2.2	7.9	25	200	0.50	600	K,M
3	SLQW4532F4R7□T	4.7	7.9	25	100	0.60	600	K,M
4	SLQW4532F6R8□T	6.8	7.9	25	80	0.80	600	K,M
5	SLQW4532F100□T	10	2.5	20	50	1.10	490	K,M
6	SLQW4532F120□T	12	2.5	20	55	1.10	490	K,M
7	SLQW4532F150□T	15	2.5	18	35	1.20	450	K,M
8	SLQW4532F180□T	18	2.5	18	29	1.20	430	K,M
9	SLQW4532F220□T	22	2.5	18	20	1.30	400	K,M
10	SLQW4532F330□T	33	2.5	18	18	1.70	350	K,M
11	SLQW4532F470□T	47	2.5	42 (Typ)	24	5.00	200	K,M
12	SLQW4532F101□T	100	1	15	3	5.90	130	J,K,M
13	SLQW4532F221□T	220	1	18@2.5MHZ	5	15.00	100	J,K,M
14	SLQW4532F561□T	560	1	10@7.9MHZ	2	12.50	110	J,K,M
15	SLQW4532F681□T	680	1	8@7.9MHZ	3	30.00	50	J,K,M
16	SLQW4532F181□T	180	1	10@7.9MHZ	3	4.50	200	J,K,M
17	SLQW4532F102□T	1000	1	10@1MHZ	1	20.00	50	J,K,M

Structure: See the following.



No.	Components	Material
A	Coating	Ultraviolet epoxy resin
B	Core	Ferrite
C	Wire	Polyurethane system enameled copper wire
D	Electrodes	Ag/ Ag-Pd/Mo-Mn with Ni and Sn plating

Reliability Test

Items	Requirements	Test Methods and Remarks
Terminal Strength	No removal or split of the termination or other defects shall occur.  Chip Mounting Pad Glass Epoxy Board	- Solder the inductor to the testing jig (glass epoxy board) using eutectic solder. Then apply a force in the direction of the arrow. 7N force. - Keep time: 10±1s - Speed: 1.0 mm/s.
Resistance to Flexure	No visible mechanical damage.  Unit: mm Flexure	- Solder the inductor to the test jig. Using a eutectic solder. Then apply a force in the direction shown as left. - Flexure: 2mm - Pressurizing Speed: 0.5mm/sec. - Keep time: 5sec.
Vibration	- No visible mechanical damage. - Inductance change: within ±5% - Q factor change: within ±20%  Cu pad Solder mask Glass Epoxy Board	- Solder the inductor to the testing jig (glass epoxy board) using eutectic solder. - The inductor shall be subjected to a simple harmonic motion having total amplitude of 1.5mm, the frequency being varied uniformly between the approximate limits of 10 and 55 Hz. - The frequency range from 10 to 55 Hz and return to 10 Hz shall be traversed in approximately 1 minute. This motion shall be applied for a period of 2 hours in each 3 mutually perpendicular directions (total of 6 hours)
Dropping	- No visible mechanical damage. - Inductance change: within ±5% - Q factor change: within ±20%	Drop chip inductor 10 times on a concrete floor from a height of 100 cm.
Solderability	90% or more of electrode area shall be Coated by new solder.	- Electrode of the coil shall be immersed in flux for 5 to 10 Seconds. - The coil shall be immersed in solder bath at a temperature of 240±5°C, Duration for 3±0.5 seconds. - Solder: Sn/3.0Ag/0.5Cu - Flux: 25% Resin and 75% ethanol in weight.
Resistance to Soldering Heat	- No visible mechanical damage. - Inductance change: within ±5% - Q factor change: within ±20%	Re-flowing Profile:  Peak 260°C max Max Ramp Up Rate=3°C/sec. Max Ramp Down Rate =6°C/sec. 60~90sec. 60~120sec. Time 25°C to Peak= 8 min Max

Items	Requirements	Test Methods and Remarks
Thermal Shock	① No visible mechanical damage. ② Inductance change: within $\pm 5\%$ ③ Q factor change: within $\pm 20\%$	① Temperature, Time: -40°C for 30 ± 3 min $\rightarrow$ $+125^{\circ}\text{C}$ for 30 ± 3 min ② Transforming interval: 20s (max.) ③ Tested cycle: 100 cycles ④ The chip shall be stabilized at normal condition for 1~2 hours before measuring.
Resistance to Low Temperature	① No visible mechanical damage. ② Inductance change: within $\pm 5\%$ ③ Q factor change: within $\pm 20\%$	① Temperature: $-40\pm 2^{\circ}\text{C}$ ② Duration: 1000^{+24} hours ③ The chip shall be stabilized at normal condition for 1~2 hours before measuring.
Resistance to High Temperature	① No mechanical damage. ② Inductance change: within $\pm 5\%$ ③ Q factor change: within $\pm 20\%$	① Temperature: $125\pm 2^{\circ}\text{C}$ ② Duration: 1000^{+24} hours ③ The chip shall be stabilized at normal condition for 1~2 hours before measuring.
Damp Heat (Steady States)	① No mechanical damage. ② Inductance change: within $\pm 5\%$ ③ Q factor change: within $\pm 20\%$	① Temperature: $60\pm 2^{\circ}\text{C}$, Humidity: 90% to 95% RH ② Duration: 1000^{+24} hours ③ The chip shall be stabilized at normal condition for 1~2 hours before measuring.
Loading Under Damp Heat	① No mechanical damage. ② Inductance change: within $\pm 5\%$ ③ Q factor change: within $\pm 20\%$	① Temperature: $60\pm 2^{\circ}\text{C}$, Humidity: 90% to 95% RH ② Duration: 1000^{+24} hours ③ Applied current: Rated current. ④ The chip shall be stabilized at normal condition for 1~2 hours before measuring.
Loading at High Temperature (Life Test)	① No mechanical damage. ② Inductance change: within $\pm 5\%$ ③ Q factor change: within $\pm 20\%$	① Temperature: $125\pm 2^{\circ}\text{C}$ ② Duration: 1000^{+24} hours ③ Applied current: Rated current. ④ The chip shall be stabilized at normal condition for 1~2 hours before measuring.

Packaging

(PACKAGING QUANTITY)

规格	1005	1608	2012	2520	3225	4532
数量(pcs)	10000	4000	2000	2000	2000	500