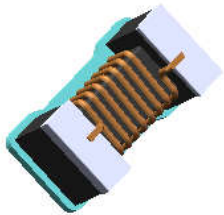


FEATURES

- Small chip suitable for surface mounting
- Large inductance with ferrite material
- Operate temperature range -40°C ~ +85°C (Including self temp. rise)
- RoHS compliant



APPLICATIONS

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

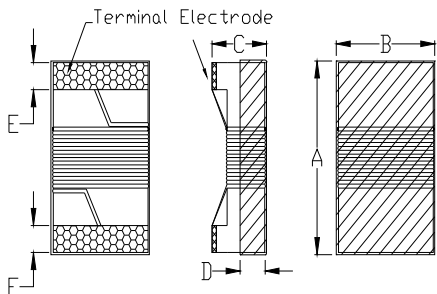
PRODUCT IDENTIFICATION

SLQW 1608 FE 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±5%,K±10%,M±20%
- ⑥ Packing :Tape & Reel

Dimensions: [mm]



Series	A	B	C	D Typ.	E Typ.
SLQW1608FE	1.80 Max	1.25 Max	1.20 Max	1.02	0.30
SLQW2012FE	2.29 Max	1.73 Max	1.52 Max	1.28	0.48

Electrical Characteristics List

SLQW1608FE Series

Part Number	Inductance	Tolerance	L Test Freq.	DC Resistance	Typ. Rated Current	Typ. Self-resonant Frequency
Units	μH	-	MHz	Ω	mA	MHz
Symbol	L	-	Freq.	DCR	I _r	S.R.F
SLQW1608FE1R0□T	1.0	K,M	7.9	0.32±30%	860	390
SLQW1608FE1R5□T	1.5	K,M	7.9	0.40±30%	720	160
SLQW1608FE1R8□T	1.8	K,M	7.9	0.43±30%	640	121
SLQW1608FE2R2□T	2.2	K,M	7.9	0.56±30%	600	103
SLQW1608FE2R7□T	2.7	K,M	7.9	0.62±30%	540	72
SLQW1608FE3R3□T	3.3	K,M	7.9	0.70±30%	500	66
SLQW1608FE3R9□T	3.9	K,M	7.9	0.83±30%	460	61
SLQW1608FE4R7□T	4.7	K,M	7.9	0.97±30%	420	51
SLQW1608FE5R6□T	5.6	K,M	7.9	1.10±30%	380	47
SLQW1608FE6R8□T	6.8	K,M	7.9	1.50±30%	340	43
SLQW1608FE8R2□T	8.2	K,M	7.9	1.68±30%	300	40
SLQW1608FE100□T	10	K,M	2.5	1.85±30%	280	36
SLQW1608FE120□T	12	K,M	2.5	2.28±30%	260	32
SLQW1608FE150□T	15	K,M	2.5	2.60±30%	240	29
SLQW1608FE180□T	18	K,M	2.5	2.90±30%	220	28
SLQW1608FE220□T	22	K,M	2.5	3.61±30%	200	24
SLQW1608FE270□T	27	K,M	2.5	5.20±30%	140	20
SLQW1608FE330□T	33	K,M	2.5	6.60±30%	120	15
SLQW1608FE470□T	47	K,M	2.5	9.65±30%	100	14

SLQW2012FE Series

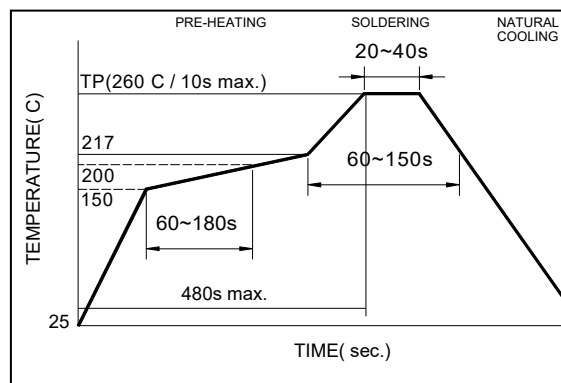
Part Number	Inductance	Tolerance	L Test Freq.	DC Resistance	Typ. Rated Current	Typ. Self-resonant Frequency
Units	μH	-	MHz	Ω	mA	MHz
Symbol	L	-	Freq.	DCR	I _r	S.R.F
SLQW2012FER47□T	0.47	K,M	7.9	0.12±30%	1500	850
SLQW2012FER68□T	0.68	K,M	7.9	0.15±30%	1300	765
SLQW2012FE1R0□T	1.0	K,M	7.9	0.13±30%	1300	208
SLQW2012FE1R2□T	1.2	K,M	7.9	0.16±30%	1270	159
SLQW2012FE1R5□T	1.5	K,M	7.9	0.17±30%	1260	159
SLQW2012FE1R8□T	1.8	K,M	7.9	0.20±30%	1080	112
SLQW2012FE2R2□T	2.2	K,M	7.9	0.22±30%	1040	87
SLQW2012FE2R7□T	2.7	K,M	7.9	0.25±30%	1040	72
SLQW2012FE3R3□T	3.3	K,M	7.9	0.28±30%	1020	70
SLQW2012FE3R9□T	3.9	K,M	7.9	0.38±30%	960	61
SLQW2012FE4R7□T	4.7	K,M	7.9	0.43±30%	840	51
SLQW2012FE5R6□T	5.6	K,M	7.9	0.50±30%	800	47
SLQW2012FE6R8□T	6.8	K,M	7.9	0.68±30%	700	46
SLQW2012FE8R2□T	8.2	K,M	7.9	0.73±30%	680	33

Part Number	Inductance	Tolerance	L Test Freq.	DC Resistance	Typ. Rated Current	Typ. Self-resonant Frequency
Units	μH	-	MHz	Ω	mA	MHz
Symbol	L	-	Freq.	DCR	I _r	S.R.F
SLQW2012FE100□T	10	K,M	2.5	0.85±30%	560	31
SLQW2012FE120□T	12	K,M	2.5	0.90±30%	460	30
SLQW2012FE150□T	15	K,M	2.5	1.40±30%	380	28
SLQW2012FE180□T	18	K,M	2.5	1.55±30%	360	27
SLQW2012FE220□T	22	K,M	2.5	1.76±29%	340	20
SLQW2012FE270□T	27	K,M	2.5	2.00±30%	300	17
SLQW2012FE330□T	33	K,M	2.5	2.35±30%	300	17
SLQW2012FE470□T	47	K,M	2.5	3.40±30%	280	15
SLQW2012FE560□T	56	K,M	2.5	4.42±30%	240	10
SLQW2012FE680□T	68	K,M	2.5	4.45±30%	240	10
SLQW2012FE820□T	82	K,M	2.5	7.50±30%	180	10
SLQW2012FE101□T	100	K,M	1.0	7.50±30%	180	9

※ □: Please specify the inductance tolerance code (K=±10%, M=±20%).

SOLDERING CONDITIONS

**Figure 1.
Re-flow
Soldering (Lead
Free)**

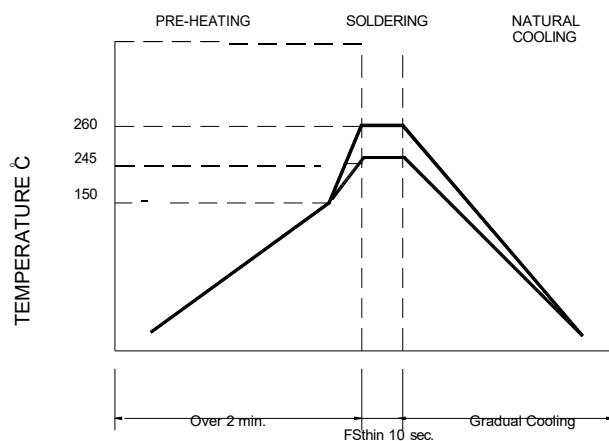


Note:

Preheat circuit and products to 150°C

280°C tip temperature (max)

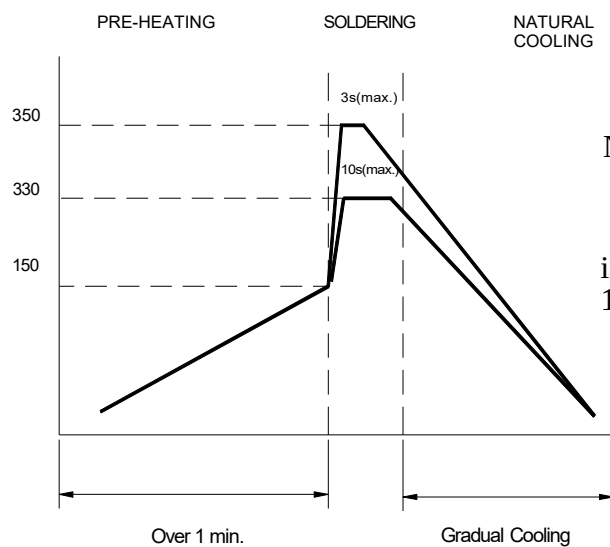
**Figure 2.
Wave Soldering**



Note:

Never contact the ceramic FSth the iron tip

**Figure 3.
Hand Soldering**



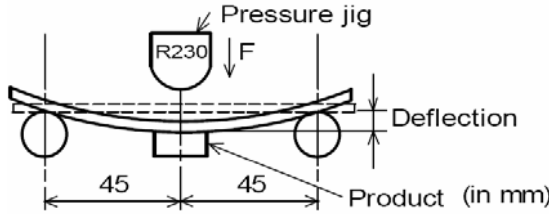
Note:

Use a 20 watt soldering iron FSth tip diameter of 1.0mm

Limit soldering time to 3 sec.

RELIABILITY TEST

TEST ITEM	SPECIFICATION	TEST CONDITION
Rating current	According to product specifications	Current sources:33010D
Inductance	According to product specifications	Test Frequency:0.252~250MHz Test Equipment:HP4291A、 HP4286A、 HP4287A、 HP4284A Test Fixture:16193Aor16334A
Q	According to product specifications	Test Frequency:0.252~1500MHz Test Equipment:HP4291A、 HP4286A、 HP4287A、 Test Fixture:16193Aor16334A
RDC	According to product specifications	Test Equipment:HP4263B
SRF	According to product specifications	Test Equipment:HP4291A Test Fixture:16193A
Solderability	The metalized area must have more then 90%of solder coverage	Soldering Temp:230±5℃ Dipping time:5±1S
Resistance to soldering heat	No evidence of mechanical damage The mealized arer must have more then 75%of solder coverage Inductance change,less than±5% Q change less than±10%	Soldering Temp:260±5℃ Dipping time:10±1S
Thermal Shock	No evidence of mechanical damage, Inductance change less than±5%, Q change less than±10%	A cycle contain:Step1:-40℃ , 30Min Step 2:85℃ , 30Min Cycle Times:10

TEST ITEM	SPECIFICATION	TEST CONDITION
High Temperature Storage	No evidence of mechanical damage, Inductance change less than $\pm 5\%$, Q change less than $\pm 10\%$	Test Temperature: $125\pm 2^{\circ}\text{C}$ (Ceramic core) $85\pm 2^{\circ}\text{C}$ (Ferrite core) Test Time: 96 ± 2 Hours
Low Temperature Storage	No evidence of mechanical damage, Inductance change less than $\pm 5\%$, Q change less than $\pm 10\%$	Test Temperature: $-40\pm 2^{\circ}\text{C}$ Test Time: 96 ± 2 Hours
Moisture Resistance	No evidence of mechanical damage, Inductance change less than $\pm 5\%$, Q change less than $\pm 10\%$	Test Temperature: $50\pm 2^{\circ}\text{C}$ Test Time:100Hours relative humidity:90~95%
Vibration	No evidence of mechanical damage, Inductance change less than $\pm 5\%$, Q change less than $\pm 10\%$	Amplitude:1.5mm X、Y、Z each direction for 1Hour and 45min Frequency range:10~55~10Hz(min)
Component Adhesion	No evidence of mechanical damage No evidence of peel off or broken Keep continuity of FSnding	Force:2Kg Test Time: 5 ± 1 sec
Resistance to bend	No evidence of mechanical damage	Camber:20mm Test Board:Glass-Epoxy board Thickness:8mm 
Life	No evidence of mechanical damage, Inductance change less than $\pm 5\%$, Q change less than $\pm 10\%$	Test Temperature: $85\pm 2^{\circ}\text{C}$ Test Time:1000Hours FSth rating current

Packaging

(PACKAGING QUANTITY)

规格	0402	0603	0805	1008	1210
数量(pcs)	10000	4000	2000	2000	2000