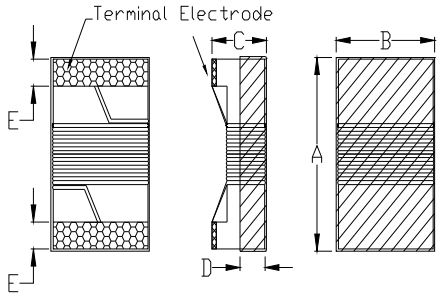
High Frequency Winding Type Chip Inductor SWI0603O-SERIES

1. Features

1. Ceramic core wire wound construction.
2. No batch to batch variations in inductance.
3. High Reliability due to ceramic wire wound construction.
4. High frequency application.
5. Small footprint as well as low profile.
6. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
8. Operating temperature-40~+125℃(Including self - temperature rise).

2. Dimensions



Size	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
SWI0603	1.80 max.	1.20 max.	1.20 max.	0.38 ref.	0.35±0.10

Unit: mm

3. Part Numbering

SWI	0603	O	-	2N0	S
A	B	C		D	E

A: Series
B: Dimension LxW
C: Category Code Industrial Grade
D: Inductance 2N0=2.0nH
E: Inductance Tolerance C=±0.2nH , S=±0.3nH , J=±5% , K=±10%

4. Specification

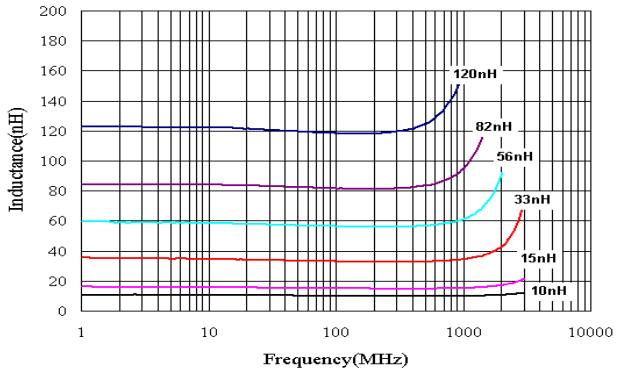
Part Number	Inductance (nH)	Tolerance	Test Frequency (Hz)	Q @ 250MHz min.	Rated Current (mA) max.	DCR (Ω) max.	SRF (MHz) min.
SWI0603O-2N0□	2.0	C,S	0.1V/250M	13	700	0.07	8000
SWI0603O-3N9□	3.9	C,S	0.1V/250M	22	700	0.07	6900
SWI0603O-4N7□	4.7	C,J,K	0.1V/250M	20	700	0.12	5800
SWI0603O-6N8□	6.8	C,J,K	0.1V/250M	27	700	0.08	5800
SWI0603O-8N2□	8.2	C,J,K	0.1V/250M	30	700	0.13	4200
SWI0603O-10N□	10	J,K	0.1V/250M	31	700	0.13	4800
SWI0603O-12N□	12	J,K	0.1V/250M	35	700	0.13	4000
SWI0603O-15N□	15	J,K	0.1V/250M	35	700	0.13	4000
SWI0603O-18N□	18	J,K	0.1V/250M	35	700	0.16	3100

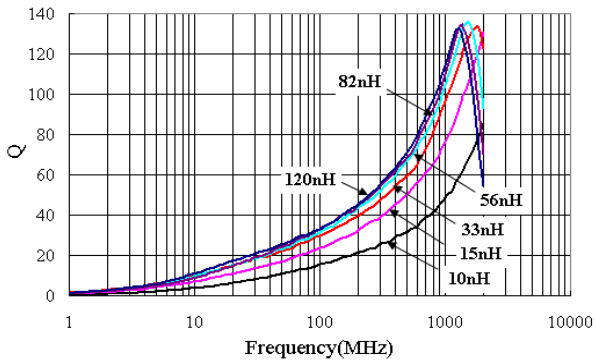
Part Number	Inductance (nH)	Tolerance	Test Frequency (Hz)	Q @ 250MHz min.	Rated Current (mA) max.	DCR (Ω) max.	SRF (MHz) min.
SWI0603O-22N□	22	J,K	0.1V/250M	38	700	0.23	3000
SWI0603O-24N□	24	J,K	0.1V/250M	38	700	0.13	2800
SWI0603O-27N□	27	J,K	0.1V/250M	40	600	0.14	2800
SWI0603O-33N□	33	J,K	0.1V/250M	40	600	0.22	2300
SWI0603O-39N□	39	J.K	0.1V/250M	40	600	0.30	2200
SWI0603O-47N□	47	J,K	0.1V/200M	38	600	0.35	2000
SWI0603O-56N□	56	J,K	0.1V/200M	38	600	0.37	1900
SWI0603O-68N□	68	J,K	0.1V/200M	37	600	0.43	1700
SWI0603O-72N□	72	J,K	0.1V/150M	34	400	0.42	1700
SWI0603O-82N□	82	J,K	0.1V/150M	34	400	0.71	1700
SWI0603O-R10□	100	J,K	0.1V/150M	34	400	0.78	1400
SWI0603O-R12□	120	J,K	0.1V/150M	32	300	0.84	1300
SWI0603O-R15□	150	J,K	0.1V/150M	28	280	0.96	990
SWI0603O-R18□	180	J,K	0.1V/100M	25	240	1.52	990
SWI0603O-R22□	220	J,K	0.1V/100M	25	200	2.02	900
SWI0603O-R27□	270	J,K	0.1V/100M	24	170	2.36	900
SWI0603O-R33□	330	J,K	0.1V/100M	24	185	3.40	700
SWI0603O-R39□	390	J,K	0.1V/100M	24	100	3.60	900

Note:

- All test data referenced to 25℃ ambient.
- DC current at 25°C that causes the specified inductance drop from its value without current.
- Current that causes the specified temperature rise from 25°C ambient.

This information is for reference only and does not represent absolute maximum ratings.





5. Recommended PC Board Pattern

Chip size							Land Patterns For Reflow Soldering		
Series	Type	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	L(mm)	G(mm)	H(mm)
SWI	0603	1.80max	1.20max	1.20max	0.38 ref	0.35±0.10	1.92	0.90	1.02

