

Features

1. SMD type chip inductors utilizing monolithic structure provide highly reliable surface mount applications.
2. Superior Q characteristics is guaranteed over the wide frequency range for high frequency applications.
3. Excellent solder heat resistance for soldering.
4. Lead Free (RoHS Compliance).

Applications

1. RF module of telecommunication products.
 - Cellular phone, Cordless telephone etc.
2. GSM Phone, PCS Phone.
3. Computer communications, Radar detectors.
4. Automotive electronics, Keyless remote.

Ordering Information

SCI - B 0603 - 120 - K J T
 (1) (2) (3) (4) (5) (6) (7)

(1) Series

(2) Material & design

(3) Dimensions

The first two digits : length (mm)
 The last two digits : width (mm)

(4) Inductance

The first two digits are values.
 The last digit is the number of zeros.
 N : a decimal point placed between first two digits

(5) Tolerance

S : $\pm 0.3nH$
 J : $\pm 5\%$
 K : $\pm 10\%$

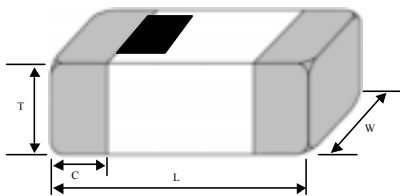
(6) Termination

J : Nickel barrier

(7) Packing

B : Bulk Packing
 T : Tape & Reel (Φ 178mm [7inches])
 L : Tape & Reel (Φ 254mm [10inches])

Shape and Dimensions



unit : mm [inches]

Type	L	W	T	C
SCI-□0603-	0.6 \pm 0.03 [.024 \pm .001]	0.3 \pm 0.03 [.012 \pm .001]	0.3 \pm 0.03 [.012 \pm .001]	0.15 \pm 0.05 [.006 \pm .002]

※ The polarity mark can be provided upon customer's request.

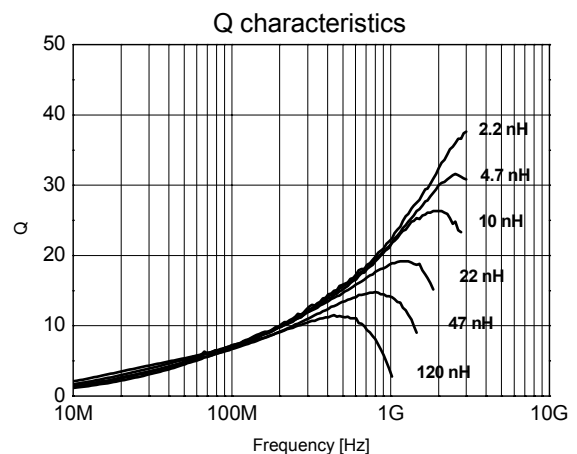
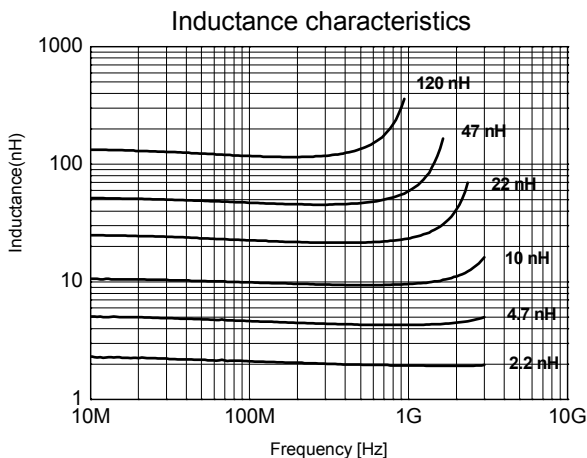
Electrical Parameters

Part No.	Inductance (at 100MHz)		Q (Min)	Q (Typ)				SRF(MHz)	DCR(mΩ)	Rated current (mA) max.
	nH	Tolerance		100MHz	100MHz	800 MHz	1.0GHz			
SCI-B0603-10N□□□	1.0	±0.3nH	4	6	20	22	31	10000	200	300
SCI-B0603-12N□□□	1.2		4	6	20	22	31	10000	200	300
SCI-B0603-15N□□□	1.5		4	6	20	22	30	10000	300	300
SCI-B0603-18N□□□	1.8		4	6	20	22	30	10000	300	300
SCI-B0603-22N□□□	2.2		4	6	20	22	30	8800	350	300
SCI-B0603-27N□□□	2.7		4	6	20	22	30	7700	400	300
SCI-B0603-33N□□□	3.3		4	6	20	22	30	6700	450	300
SCI-B0603-39N□□□	3.9		4	6	20	22	29	6000	500	300
SCI-B0603-47N□□□	4.7		4	6	19	21	29	5300	550	300
SCI-B0603-56N□□□	5.6		4	6	19	21	28	4600	600	300
SCI-B0603-68N□□□	6.8	± 5%	4	6	19	21	27	3900	700	250
SCI-B0603-82N□□□	8.2		4	6	19	21	26	3400	800	250
SCI-B0603-100□□□	10		4	6	19	21	25	2900	900	250
SCI-B0603-120□□□	12		5	7	19	21	23	2700	1100	250
SCI-B0603-150□□□	15		5	7	18	20	21	2300	1200	250
SCI-B0603-180□□□	18		5	7	18	19	18	2100	1400	200
SCI-B0603-220□□□	22		5	7	17	18	14	1800	1700	200
SCI-B0603-270□□□	27		5	7	17	18	-	1800	2400	100
SCI-B0603-330□□□	33		5	7	16	16	-	1700	2700	100
SCI-B0603-390□□□	39		5	7	15	15	-	1500	3000	50
SCI-B0603-470□□□	47		5	7	14	13	-	1300	3500	50
SCI-B0603-560□□□	56		5	7	13	12	-	1100	4000	50
SCI-B0603-680□□□	68		5	7	12	10	-	1100	5000	50
SCI-B0603-820□□□	82		5	7	11	8	-	1000	5000	50
SCI-B0603-101□□□	100		5	7	10	6	-	900	5500	40
SCI-B0603-121□□□	120	5	7	7	2	-	800	6000	40	

* SRF : Self-Resonant Frequency.

* DCR : DC Resistance

Electrical Characteristic Curves



Test Equipment & Fixture

L, Q : RF Impedance Analyzer 4991A(Agilent) , Test Fixture 16196C(Agilent)

SRF : Network Analyzer 8722ES (Agilent)

Rdc : TWA-161A,B