

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

$\frac{\text{SCI}}{(1)}$ - $\frac{\text{B}}{(2)}$ $\frac{2012}{(3)}$ - $\frac{120}{(4)}$ - $\frac{\text{K}}{(5)}$ $\frac{\text{J}}{(6)}$ $\frac{\text{T}}{(7)}$

(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 : $\pm 0.3\text{nH}$
J : $\pm 5\%$
K : $\pm 10\%$

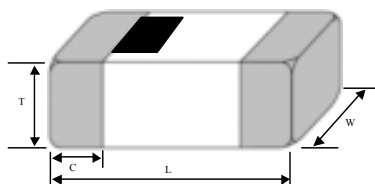
(6) Termination

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-□2012-	2.0 \pm 0.2 [.079 \pm .008]	1.25 \pm 0.2 [.049 \pm .008]	1.0 \pm 0.2 [.047 \pm .008]	0.50 \pm 0.30 [.020 \pm .012]

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

Electrical Parameters

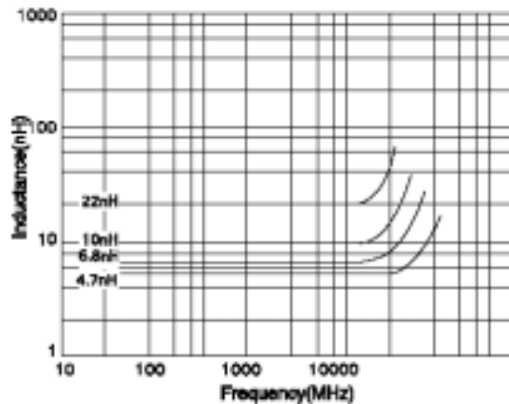
Part No.	Inductance		Q min.	L, Q test frequency(MHz)	SRF (MHz)		DCR (mΩ) max.	Rated current (mA) max.
	nH	Tolerance			min.	typ.		
SCI-B2012-10N□□□	1.0	±0.3nH	10	100	4000	12000	100	300
SCI-B2012-12N□□□	1.2		10	100	4000	10000	100	300
SCI-B2012-15N□□□	1.5		10	100	4000	10000	100	300
SCI-B2012-18N□□□	1.8		10	100	4000	8000	100	300
SCI-B2012-22N□□□	2.2		10	100	3800	8000	100	300
SCI-B2012-27N□□□	2.7		10	100	3600	6000	100	300
SCI-B2012-33N□□□	3.3		10	100	3400	6000	130	300
SCI-B2012-39N□□□	3.9		10	100	3200	5400	150	300
SCI-B2012-47N□□□	4.7		10	100	3000	4500	200	300
SCI-B2012-56N□□□	5.6		10	100	2800	4000	230	300
SCI-B2012-68N□□□	6.8	± 5% ± 10%	10	100	2600	3650	250	300
SCI-B2012-82N□□□	8.2		10	100	2200	3000	280	300
SCI-B2012-100□□□	10		10	100	1800	2500	300	300
SCI-B2012-120□□□	12		10	100	1650	2450	350	300
SCI-B2012-150□□□	15		10	100	1350	2000	400	300
SCI-B2012-180□□□	18		10	100	1350	1750	450	300
SCI-B2012-220□□□	22		15	100	1100	1500	500	300
SCI-B2012-270□□□	27		15	100	1100	1500	550	300
SCI-B2012-330□□□	33		15	100	900	1200	600	300
SCI-B2012-390□□□	39		15	100	900	1150	650	300
SCI-B2012-470□□□	47	15	100	850	1050	700	300	
SCI-B2012-560□□□	56	15	100	750	1000	750	300	
SCI-B2012-680□□□	68	15	100	700	950	800	300	
SCI-B2012-820□□□	82	15	100	600	850	900	300	
SCI-B2012-101□□□	100	15	100	500	730	1000	300	
SCI-B2012-121□□□	120	15	50	450	630	1300	250	
SCI-B2012-151□□□	150	15	50	400	570	1500	250	
SCI-B2012-181□□□	180	15	50	350	510	1800	250	
SCI-B2012-221□□□	220	10	50	330	450	2000	250	
SCI-B2012-271□□□	270	10	50	300	410	2500	250	
SCI-B2012-331□□□	330	10	50	270	370	3000	250	
SCI-B2012-391□□□	390	10	50	220	330	3500	250	
SCI-B2012-471□□□	470	10	50	180	280	4000	250	

* SRF : Self-Resonant Frequency.

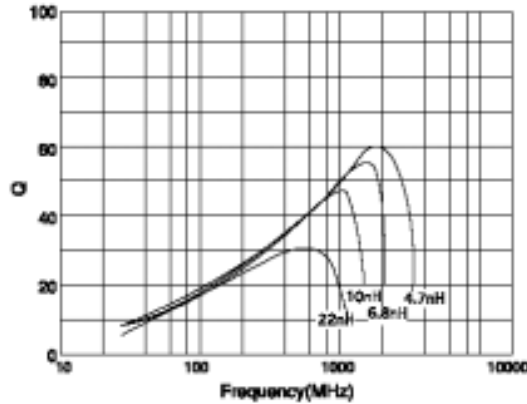
* DCR : DC Resistance

Electrical Characteristic Curves

Inductance Characteristics



Q Characteristics



Test Equipment & Fixture

L, Q : RF Impedance Analyzer HP4291A , Test Fixture HP16192A

SRF : Network Analyzer 8722ES (Agilent) , Rdc : TWA-161A,B

*All specifications are subject to change without notice.