

### 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 1005 - 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 :  $\pm 10\%$

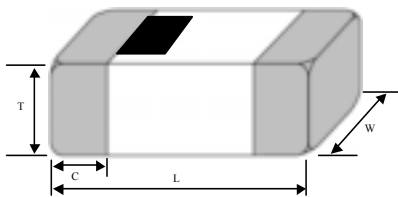
**(6) Termination**

J : Nickel barrier

**(7) Packing**

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

### Shape and Dimensions



unit : mm [inches]

Type	L	W	T	C
SCI-□1005-	1.0±0.10 [.039±.004]	0.5±0.10 [.020±.004]	0.5±0.10 [.020±.004]	0.20±0.10 [.008±.004]

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

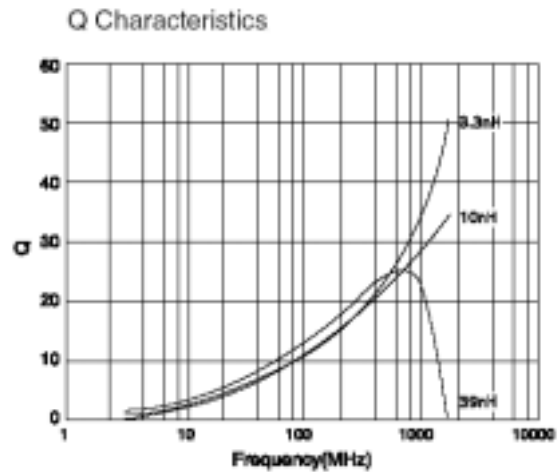
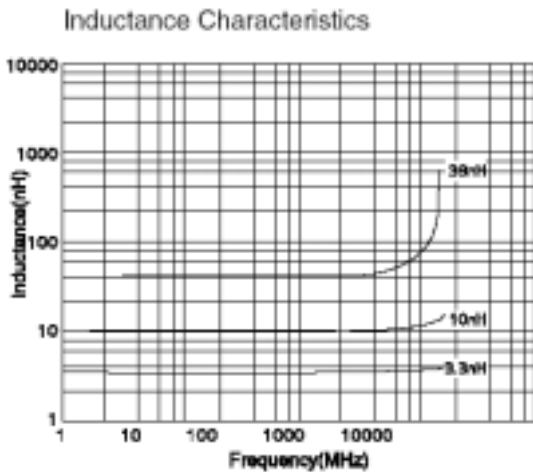
### Electrical Parameters

Part No.	Inductance		Q (min.)			Q (typ.)		SRF (MHz)		DCR (mΩ) max.	Rated current (mA) max
	nH	Tolerance	100MHz	800MHz	1.8GHz	min.	typ.	min.	typ.		
SCI-B1005-10N□□□	1.0	±0.3nH	8	39	65	6000	13000	100	300		
SCI-B1005-12N□□□	1.2		8	36	56	6000	10000	120	300		
SCI-B1005-15N□□□	1.5		8	35	55	6000	10000	120	300		
SCI-B1005-18N□□□	1.8		8	33	52	6000	9500	140	300		
SCI-B1005-22N□□□	2.2		8	31	50	6000	9000	160	300		
SCI-B1005-27N□□□	2.7		8	30	45	6000	9000	200	300		
SCI-B1005-33N□□□	3.3		8	30	44	6000	8000	220	300		
SCI-B1005-39N□□□	3.9		8	30	44	4000	6500	250	300		
SCI-B1005-47N□□□	4.7		8	29	42	4000	5000	280	300		
SCI-B1005-56N□□□	5.6		8	29	41	4000	5000	300	300		
SCI-B1005-68N□□□	6.8	± 5%	8	29	39	3900	4400	350	300		
SCI-B1005-82N□□□	8.2		8	29	38	3600	4000	400	250		
SCI-B1005-100□□□	10.0		8	28	35	3200	3500	450	250		
SCI-B1005-120□□□	12		8	28	32	2700	3500	500	200		
SCI-B1005-150□□□	15		8	27	28	2300	3000	550	200		
SCI-B1005-180□□□	18		8	26	22	2100	2600	650	200		
SCI-B1005-220□□□	22		8	25	16	1900	2200	800	200		
SCI-B1005-270□□□	27		8	25	-	1600	1900	900	200		
SCI-B1005-330□□□	33		8	23	-	1300	1700	1100	200		
SCI-B1005-390□□□	39		8	19	-	1200	1600	1200	100		
SCI-B1005-470□□□	47	8	18	-	1000	1300	1300	100			
SCI-B1005-560□□□	56	8	-	-	750	900	1400	100			
SCI-B1005-680□□□	68	8	-	-	700	800	1400	100			
SCI-B1005-820□□□	82	8	-	-	600	700	1600	100			
SCI-B1005-101□□□	100	8	-	-	350	650	2000	100			

\* SRF : Self-Resonant Frequency.

\* DCR : DC Resistance

### Electrical Characteristic Curves



#### Test Equipment & Fixture

L, Q : RF Impedance Analyzer 4991A(Agilent) , Test Fixture HP16193A  
 SRF : Network Analyzer 8722ES (Agilent)  
 Rdc : TWA-161A,B