

1. Part No. Expression

SCI0402C1N0J

(a) (b) (c) (d) (e)

a) Series Code

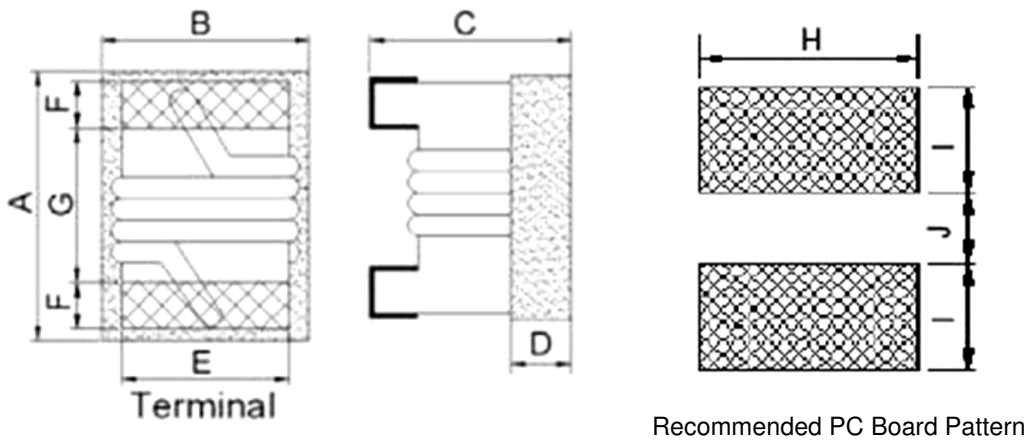
b) Dimension Code

c) Material Code

d) Inductance Code

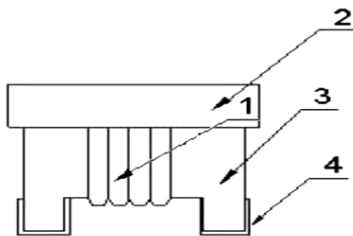
e) Tolerance Code

2. Configuration & Dimensions: (Unit:- mm)



A	B	C	D	E	F	G	H	I	J
1.19 Max	0.70 Max	0.66 Max	0.25 Ref	0.51 Ref	0.23 Ref	0.56 Ref	0.66 Ref	0.36 Ref	0.46 Ref

3. Material List



- (1) Wire
- (2) Epoxy
- (3) Core
- (4) Terminal

NOTE: Specifications subject to change without notice. Please check our website for latest information.

4. General Specifications

- (a) Operating Temp.: -40°C to +125°C (Including self - temperature rise).
- (b) Storage Temp.: -40°C to +125°C (on board).
- (c) Rated Current: 15°C rise above 25°C ambient.
- (d) Storage Condition (Component in its packaging)
 - i) Temperature: -10°C to +40°C.
 - ii) Humidity: 70% RH.

5. Electrical Characteristics

Part No	Inductance (nH)	Test Frequency For L (Hz)	Tolerance	Q Typ	Test Frequency For Q (Hz)	I _{rms} (mA) Typ	DCR (Ω) Max	SRF (MHz) Typ
SCI0402C1N0□	1.0	0.2V/250M	B, C, J, K	16	0.2V/250M	1360	0.045	12700
SCI0402C1N2□	1.2	0.2V/250M	B, C, J, K	10	0.2V/250M	640	0.14	10400
SCI0402C1N3□	1.3	0.2V/250M	B, C, J, K	10	0.2V/250M	640	0.14	10400
SCI0402C1N9□	1.9	0.2V/250M	B, C, G, J, K	16	0.2V/250M	1040	0.07	11300
SCI0402C2N0□	2.0	0.2V/250M	B, C, G, J, K	16	0.2V/250M	1040	0.07	11100
SCI0402C2N2□	2.2	0.2V/250M	B, C, G, J, K	19	0.2V/250M	960	0.07	10800
SCI0402C2N4□	2.4	0.2V/250M	B, C, G, J, K	15	0.2V/250M	790	0.068	10500
SCI0402C2N5□	2.5	0.2V/250M	B, C, G, J, K	13	0.2V/250M	640	0.15	10400
SCI0402C2N7□	2.7	0.2V/250M	B, C, G, J, K	16	0.2V/250M	640	0.12	10400
SCI0402C3N3□	3.3	0.2V/250M	B, C, G, J, K	19	0.2V/250M	840	0.066	7000
SCI0402C3N6□	3.6	0.2V/250M	B, C, G, J, K	19	0.2V/250M	840	0.066	6800
SCI0402C3N9□	3.9	0.2V/250M	B, C, G, J, K	19	0.2V/250M	840	0.066	6000
SCI0402C4N3□	4.3	0.2V/250M	B, C, G, J, K	18	0.2V/250M	700	0.091	6000
SCI0402C4N7□	4.7	0.2V/250M	B, C, G, J, K	15	0.2V/250M	640	0.13	4770
SCI0402C5N1□	5.1	0.2V/250M	B, C, G, J, K	20	0.2V/250M	800	0.083	4800
SCI0402C5N6□	5.6	0.2V/250M	G, J, K	20	0.2V/250M	760	0.083	4800
SCI0402C5N8□	5.8	0.2V/250M	G, J, K	20	0.2V/250M	760	0.083	4800
SCI0402C6N2□	6.2	0.2V/250M	G, J, K	20	0.2V/250M	760	0.083	4800
SCI0402C6N8□	6.8	0.2V/250M	G, J, K	20	0.2V/250M	680	0.083	4800
SCI0402C7N3□	7.3	0.2V/250M	G, J, K	20	0.2V/250M	680	0.12	4800

Tolerance: B= ±0.1nH, C= ±0.2nH, G= ±2%, J= ±5%, K= ±10%.

NOTE: Specifications subject to change without notice. Please check our website for latest information.



Part No	Inductance (nH)	Test Frequency For L (Hz)	Tolerance	Q Typ	Test Frequency For Q (Hz)	I _{rms} (mA) Typ	DCR (Ω) Max	SRF (MHz) Typ
SCI0402C7N5□	7.5	0.2V/250M	G, J, K	22	0.2V/250M	680	0.1	4800
SCI0402C8N2□	8.2	0.2V/250M	G, J, K	22	0.2V/250M	680	0.1	4400
SCI0402C8N7□	8.7	0.2V/250M	G, J, K	18	0.2V/250M	480	0.2	4100
SCI0402C9N0□	9.0	0.2V/250M	G, J, K	22	0.2V/250M	680	0.1	4160
SCI0402C9N1□	9.1	0.2V/250M	G, J, K	22	0.2V/250M	680	0.1	4160
SCI0402C9N5□	9.5	0.2V/250M	G, J, K	18	0.2V/250M	480	0.2	4000
SCI0402C10N□	10	0.2V/250M	G, J, K	21	0.2V/250M	480	0.2	3900
SCI0402C11N□	11	0.2V/250M	G, J, K	24	0.2V/250M	640	0.12	3680
SCI0402C12N□	12	0.2V/250M	G, J, K	24	0.2V/250M	640	0.12	3600
SCI0402C13N□	13	0.2V/250M	G, J, K	24	0.2V/250M	440	0.21	3450
SCI0402C15N□	15	0.2V/250M	G, J, K	24	0.2V/250M	560	0.17	3280
SCI0402C16N□	16	0.2V/250M	G, J, K	24	0.2V/250M	560	0.22	3100
SCI0402C18N□	18	0.2V/250M	G, J, K	25	0.2V/250M	420	0.23	3100
SCI0402C19N□	19	0.2V/250M	G, J, K	24	0.2V/250M	480	0.2	3040
SCI0402C20N□	20	0.2V/250M	G, J, K	25	0.2V/250M	420	0.25	3000
SCI0402C22N□	22	0.2V/250M	G, J, K	25	0.2V/250M	400	0.3	2800
SCI0402C23N□	23	0.2V/250M	G, J, K	22	0.2V/250M	400	0.3	2720
SCI0402C24N□	24	0.2V/250M	G, J, K	25	0.2V/250M	400	0.3	2700
SCI0402C27N□	27	0.2V/250M	G, J, K	24	0.2V/250M	400	0.3	2480
SCI0402C30N□	30	0.2V/250M	G, J, K	25	0.2V/250M	400	0.35	2350
SCI0402C33N□	33	0.2V/250M	G, J, K	24	0.2V/250M	400	0.4	2350
SCI0402C36N□	36	0.2V/250M	G, J, K	24	0.2V/250M	320	0.44	2320
SCI0402C39N□	39	0.2V/250M	G, J, K	25	0.2V/250M	200	0.55	2100
SCI0402C40N□	40	0.2V/250M	G, J, K	24	0.2V/250M	320	0.65	2240
SCI0402C43N□	43	0.2V/250M	G, J, K	25	0.2V/250M	100	0.81	2030
SCI0402C47N□	47	0.2V/250M	G, J, K	25	0.2V/250M	150	0.83	2100
SCI0402C51N□	51	0.2V/250M	G, J, K	25	0.2V/250M	100	0.82	1750
SCI0402C56N□	56	0.2V/250M	G, J, K	22	0.2V/250M	100	0.97	1760
SCI0402C68N□	68	0.2V/250M	G, J, K	22	0.2V/250M	100	1.12	1620
SCI0402C72N□	72	0.2V/250M	G, J, K	22	0.2V/250M	30	2	1260
SCI0402C77N□	77	0.2V/250M	G, J, K	22	0.2V/250M	50	1.8	1260
SCI0402C82N□	82	0.2V/250M	G, J, K	22	0.2V/250M	50	1.55	1260

Tolerance: B= ± 0.1 nH, C= ± 0.2 nH, G= $\pm 2\%$, J= $\pm 5\%$, K= $\pm 10\%$.

NOTE: Specifications subject to change without notice. Please check our website for latest information.



Part No	Inductance (nH)	Test Frequency For L (Hz)	Tolerance	Q Typ	Test Frequency For Q (Hz)	I _{rms} (mA) Typ	DCR (Ω) Max	SRF (MHz) Typ
SCI0402CR10□	100	0.2V/250M	G, J, K	22	0.2V/250M	30	2	1160
SCI0402CR12□	120	0.2V/100M	G, J, K	22	0.2V/100M	110	2.4	1000
SCI0402CR18□	180	0.2V/100M	G, J, K	8	0.2V/100M	50	2.7	700
SCI0402CR22□	220	0.2V/100M	G, J, K	8	0.2V/100M	50	4	700

Tolerance: B= ±0.1nH, C= ±0.2nH, G= ±2%, J= ±5%, K= ±10%.

NOTE: Specifications subject to change without notice. Please check our website for latest information.



6. Soldering and Mounting

Mildly activated rosin fluxes are preferred. Our terminations are suitable for all re-flow soldering systems. If hand soldering cannot be avoided, the preferred technique is the utilization of hot air soldering tools.

6-1 Solder Re-flow

Recommended temperature profiles for re-flow soldering in Figure 1.

6-2 Soldering Iron (Figure 2)

Products attachment with soldering iron is discouraged due to the inherent process control limitations. In the event that a soldering iron must be employed the following precautions are recommended.

Note:

- Preheat circuit and products to 150°C.
- 350°C tip temperature (Max.)
- Never contact the ceramic with the iron tip
- 1.0mm tip diameter (Max.)
- Use a 20 Watt soldering iron with tip diameter of 1.0mm.
- Limit soldering time to 4~5 sec.

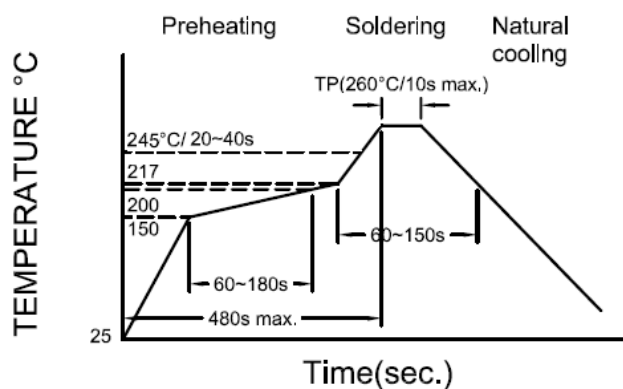


Figure 1: Re-flow Soldering Time
3 times Max.

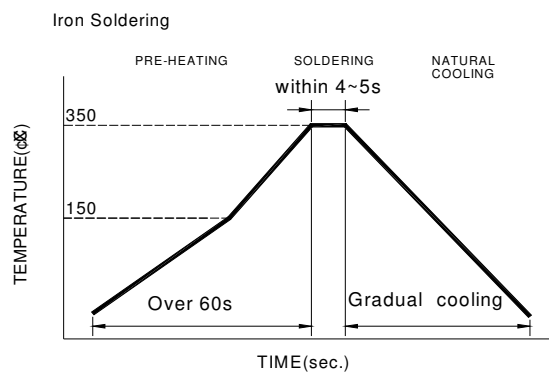
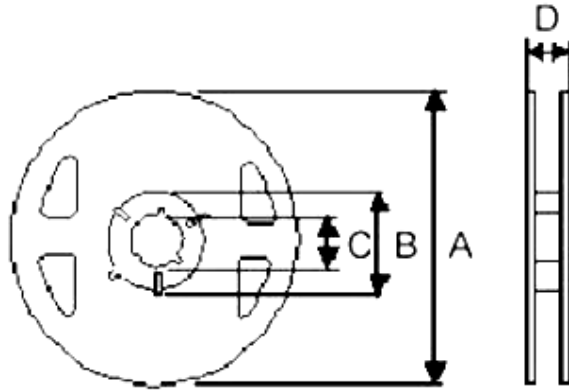


Figure 2: Iron Soldering Time
1 times Max.

NOTE: Specifications subject to change without notice. Please check our website for latest information.

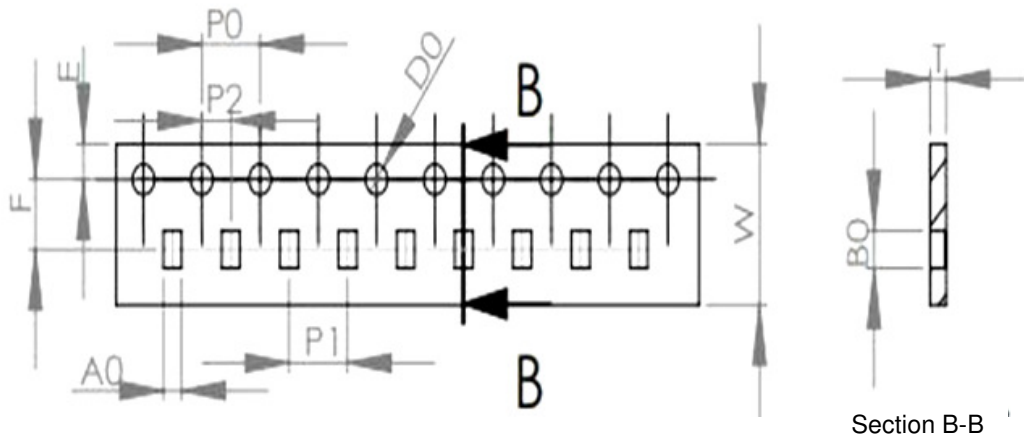
7. Packaging Information

7-1 Reel Dimension



Type	A(mm)	B(mm)	C(mm)	D(mm)
7"x8mm	180 Ref	60.0 Ref	13.0 Ref	14.4 Ref

7-2 Tape Dimension



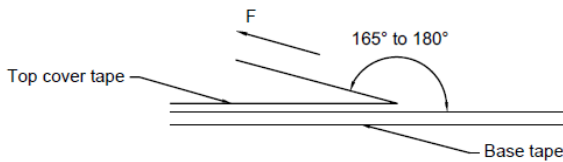
Size	A0(mm)	B0(mm)	T(mm)	W(mm)	P0(mm)	P1(mm)	P2(mm)	D0(mm)	E(mm)	F(mm)
SCI0402C	1.23 Ref	0.67 Ref	0.75 Ref	8.00 Ref	4.00 Ref	2.00 Ref	2.00 Ref	1.55 Ref	1.75 Ref	3.50 Ref

NOTE: Specifications subject to change without notice. Please check our website for latest information.

7-3 Packaging Quantity

Chip Size	SCI0402C
Chip/Reel	4000
Inner Carton	20000
Outer Carton	200000

7-4 Tearing Off Force



The force for tearing off cover tape is 10 to 100 grams in the arrow direction under the following conditions.

Room Temp. (°C)	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300

Application Notice:

1. Storage Conditions:

To maintain the solderability of terminal electrodes:

- a) Recommended products should be used within 12 months from the time of delivery.
- b) The packaging material should be kept where no chlorine or sulfur exists in the air.

2. Transportation:

- a) Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- b) Vacuum pick up is strongly recommended for individual components.
- c) Bulk handling should ensure that abrasion and mechanical shock are minimized.

NOTE: Specifications subject to change without notice. Please check our website for latest information.

