

1. Part No. Expression

SCI0805C2N2K

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

a) Series Code

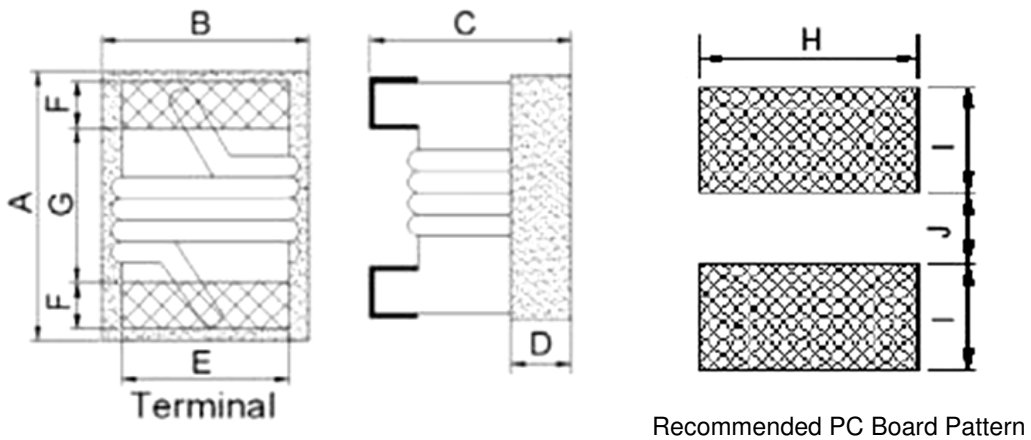
b) Dimension Code

c) Material Code

d) Inductance Code

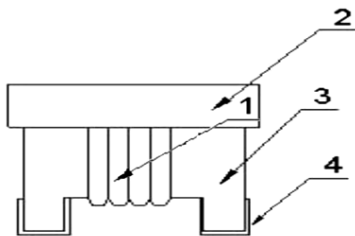
e) Tolerance Code

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



A	B	C	D	E	F	G	H	I	J
2.35 Max	1.73 Max	1.52 Max	0.70 Ref	1.27 Ref	0.51 Ref	1.02 Ref	1.78 Ref	1.02 Ref	0.76 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
SCI0805C2N2□	2.2	0.2V/250M	K	50	0.2V/1500M	800	0.05	7900
SCI0805C2N7□	2.7	0.2V/250M	B, C, J, K	50	0.2V/1500M	800	0.058	7900
SCI0805C2N8□	2.8	0.2V/250M	B, C, J, K	80	0.2V/1500M	800	0.06	7900
SCI0805C3N0□	3.0	0.2V/250M	B, C, J, K	65	0.2V/1500M	800	0.06	7900
SCI0805C3N3□	3.3	0.2V/250M	B, C, J, K	50	0.2V/1500M	600	0.08	7900
SCI0805C4N1□	4.1	0.2V/250M	B, C, J, K	60	0.2V/1000M	600	0.06	5800
SCI0805C5N1□	5.1	0.2V/250M	G, J, K	60	0.2V/1000M	600	0.06	5800
SCI0805C5N6□	5.6	0.2V/250M	G, J, K	65	0.2V/1000M	600	0.06	5500
SCI0805C6N2□	6.2	0.2V/250M	G, J, K	50	0.2V/1000M	600	0.11	5500
SCI0805C6N8□	6.8	0.2V/250M	G, J, K	50	0.2V/1000M	600	0.06	5500
SCI0805C7N5□	7.5	0.2V/250M	G, J, K	50	0.2V/1000M	600	0.06	4500
SCI0805C8N2□	8.2	0.2V/250M	G, J, K	50	0.2V/1000M	600	0.06	4700
SCI0805C8N7□	8.7	0.2V/250M	G, J, K	50	0.2V/1000M	600	0.23	4700
SCI0805C10N□	10	0.2V/250M	G, J, K	60	0.2V/500M	600	0.08	4200
SCI0805C12N□	12	0.2V/250M	G, J, K	50	0.2V/500M	600	0.08	4000
SCI0805C14N□	14	0.2V/250M	G, J, K	50	0.2V/500M	600	0.17	3400
SCI0805C15N□	15	0.2V/250M	G, J, K	50	0.2V/500M	700	0.1	3400
SCI0805C16N□	16	0.2V/250M	G, J, K	50	0.2V/500M	600	0.19	3300
SCI0805C18N□	18	0.2V/250M	G, J, K	50	0.2V/500M	600	0.1	3300
SCI0805C22N□	22	0.2V/250M	G, J, K	55	0.2V/500M	500	0.12	2600

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

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Part No	Inductance (nH)	Test Frequency For L (Hz)	Tolerance	Q Typ	Test Frequency For Q (Hz)	Irms (mA) Typ	DCR (Ω) Max	SRF (MHz) Typ
SCI0805C24N□	24	0.2V/250M	G, J, K	50	0.2V/500M	500	0.12	2000
SCI0805C27N□	27	0.2V/250M	G, J, K	55	0.2V/500M	500	0.12	2500
SCI0805C33N□	33	0.2V/250M	G, J, K	60	0.2V/500M	500	0.13	2050
SCI0805C36N□	36	0.2V/250M	G, J, K	55	0.2V/500M	500	0.13	1700
SCI0805C39N□	39	0.2V/250M	G, J, K	60	0.2V/500M	500	0.15	2000
SCI0805C43N□	43	0.2V/200M	G, J, K	60	0.2V/500M	500	0.15	1650
SCI0805C47N□	47	0.2V/200M	G, J, K	60	0.2V/500M	500	0.17	1650
SCI0805C50N□	50	0.2V/200M	G, J, K	60	0.2V/500M	500	0.34	1650
SCI0805C56N□	56	0.2V/200M	G, J, K	60	0.2V/500M	500	0.19	1550
SCI0805C68N□	68	0.2V/200M	G, J, K	60	0.2V/500M	500	0.22	1450
SCI0805C75N□	75	0.2V/150M	G, J, K	60	0.2V/500M	400	0.4	1400
SCI0805C82N□	82	0.2V/150M	G, J, K	65	0.2V/500M	400	0.4	1300
SCI0805C84N□	84	0.2V/150M	G, J, K	65	0.2V/500M	400	0.48	1300
SCI0805C91N□	91	0.2V/150M	G, J, K	65	0.2V/500M	400	0.48	1200
SCI0805CR10□	100	0.2V/150M	G, J, K	65	0.2V/500M	400	0.46	1200
SCI0805CR11□	110	0.2V/150M	G, J, K	50	0.2V/250M	400	0.48	1000
SCI0805CR12□	120	0.2V/150M	G, J, K	50	0.2V/250M	400	0.51	1100
SCI0805CR13□	130	0.2V/150M	G, J, K	50	0.2V/250M	400	0.55	1100
SCI0805CR15□	150	0.2V/100M	G, J, K	50	0.2V/250M	400	0.56	920
SCI0805CR16□	160	0.2V/100M	G, J, K	50	0.2V/250M	400	0.6	900
SCI0805CR18□	180	0.2V/100M	G, J, K	50	0.2V/250M	400	0.64	870
SCI0805CR20□	200	0.2V/100M	G, J, K	50	0.2V/250M	400	0.68	865
SCI0805CR22□	220	0.2V/100M	G, J, K	50	0.2V/250M	400	0.7	850
SCI0805CR24□	240	0.2V/100M	G, J, K	44	0.2V/250M	350	1	690
SCI0805CR25□	250	0.2V/100M	G, J, K	48	0.2V/250M	350	1	680
SCI0805CR27□	270	0.2V/100M	G, J, K	48	0.2V/250M	350	1	650
SCI0805CR30□	300	0.2V/100M	G, J, K	48	0.2V/250M	330	1.4	790
SCI0805CR33□	330	0.2V/100M	G, J, K	48	0.2V/250M	310	1.4	750
SCI0805CR36□	360	0.2V/100M	G, J, K	48	0.2V/250M	300	1.45	650
SCI0805CR39□	390	0.2V/100M	G, J, K	48	0.2V/250M	290	1.5	560
SCI0805CR43□	430	0.2V/50M	G, J, K	33	0.2V/100M	270	1.70	430
SCI0805CR47□	470	0.2V/50M	G, J, K	33	0.2V/100M	250	1.76	450

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

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Part No	Inductance (nH)	Test Frequency For L (Hz)	Tolerance	Q Typ	Test Frequency For Q (Hz)	Irms (mA) Typ	DCR (Ω) Max	SRF (MHz) Typ
SCI0805CR51□	510	0.2V/25M	G, J, K	23	0.2V/50M	230	1.90	340
SCI0805CR56□	560	0.2V/25M	G, J, K	23	0.2V/50M	230	1.90	340
SCI0805CR62□	620	0.2V/25M	G, J, K	23	0.2V/50M	210	2.00	220
SCI0805CR68□	680	0.2V/25M	G, J, K	23	0.2V/50M	190	2.15	188
SCI0805CR75□	750	0.2V/25M	G, J, K	23	0.2V/50M	180	2.25	200
SCI0805CR82□	820	0.2V/25M	G, J, K	23	0.2V/50M	180	2.35	215
SCI0805CR88□	880	0.2V/25M	G, J, K	22	0.2V/50M	180	2.38	212
SCI0805CR91□	910	0.2V/25M	G, J, K	22	0.2V/50M	180	2.40	210
SCI0805CR93□	930	0.2V/25M	G, J, K	22	0.2V/50M	180	2.45	200
SCI0805C1R0□	1000	0.2V/25M	G, J, K	20	0.2V/50M	180	2.50	200
SCI0805C1R2□	1200	0.2V/7.9M	G, J, K	18	0.2V/7.9M	170	2.45	160
SCI0805C1R5□	1500	0.2V/7.9M	G, J, K	16	0.2V/7.9M	170	2.50	120
SCI0805C1R8□	1800	0.2V/7.9M	G, J, K	16	0.2V/7.9M	170	2.50	80
SCI0805C2R2□	2200	0.2V/7.9M	G, J, K	16	0.2V/7.9M	160	3.90	65
SCI0805C2R7□	2700	0.2V/7.9M	G, J, K	16	0.2V/7.9M	160	4.00	50
SCI0805C3R3□	3300	0.2V/7.9M	G, J, K	15	0.2V/7.9M	90	4.40	20
SCI0805C4R7□	4700	0.2V/7.9M	G, J, K	15	0.2V/7.9M	130	6.40	40

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

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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.

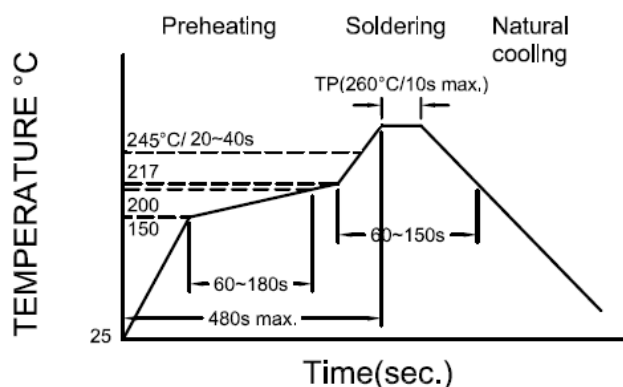


Figure 1: Re-flow Soldering Time
3 times Max.

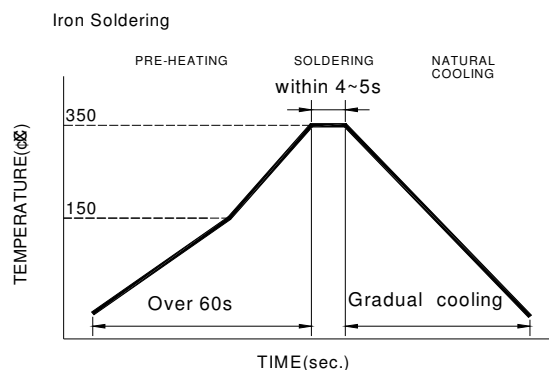
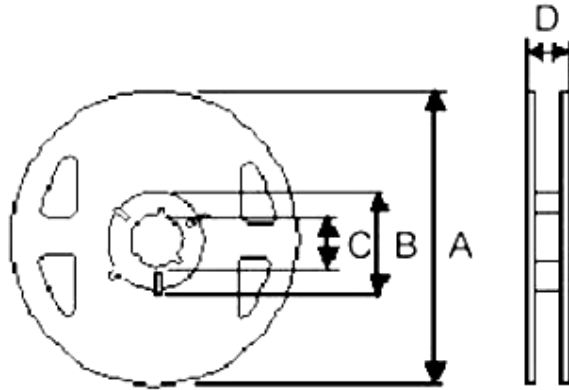


Figure 2: Iron Soldering Time
1 times Max.

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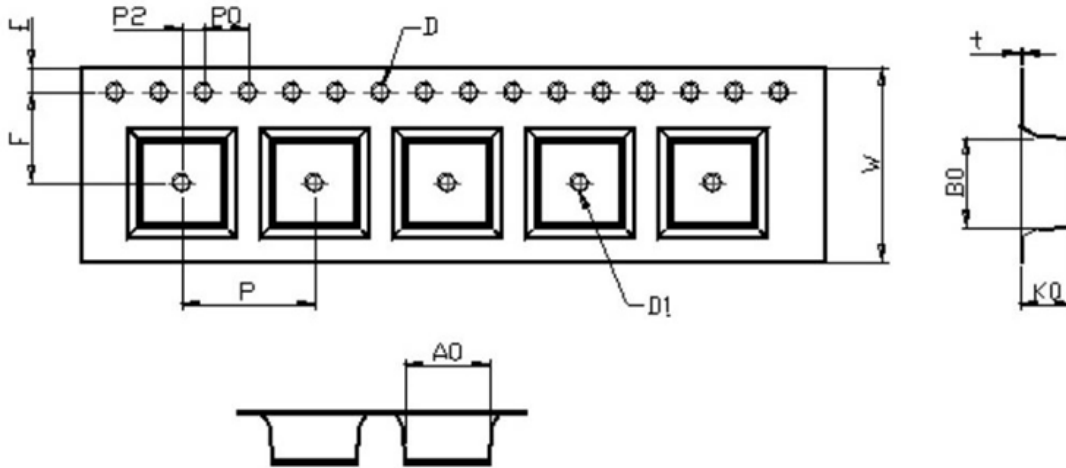
7. Packaging Information

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



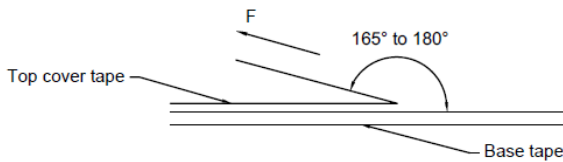
Size	A0(mm)	B0(mm)	T(mm)	W(mm)	P(mm)	P0(mm)	P2(mm)	F(mm)	E(mm)	D(mm)	K0(mm)
SCI0805C	1.85 Ref	2.45 Ref	0.23 Ref	8.00 Ref	4.00 Ref	4.00 Ref	2.00 Ref	3.50 Ref	1.75 Ref	1.50 Ref	1.55 Ref

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

7-3 Packaging Quantity

Chip Size	SCI0805C
Chip/Reel	2000
Inner Carton	10000
Outer Carton	100000

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.

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