

## SMD Wire-Wound Ceramic Chip Inductor For Signal Line

Wire wound ceramic chip inductor offers the overall combination of low cost, close tolerance, better Q factor and high self-resonant multiplayer chip inductor.

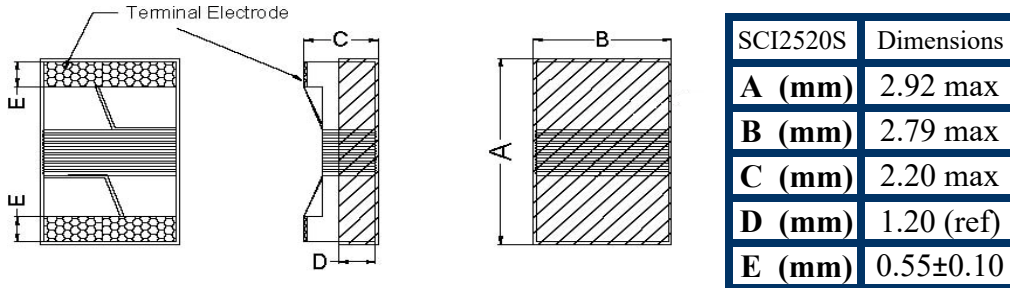
### SCI S-Series

## SCI2520S type

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SCI2520S [1008 inch]

◆ SHAPE & DIMENSIONS



◆ PART NUMBER CONSTRUCTION

SCI	2520	S	—	4N7	K	T
Series name	L*W*T Dimensions (mm)	S type Signal Line		Inductance (uH) at 2.52/7.96/25/50MHz	Inductance Tolerance	Taping
SMD Ceramic Inductor	2.92*2.79*2.2			4N7 10N R53 R56 12N 15N R62 R63 18N 22N R68 R75 24N 27N R82 R91 33N 39N 1R0 1R2 47N 56N 1R5 1R8 68N 82N 2R2 2R7 R10 R12 3R3 3R9 R15 R18 4R7 5R6 R20 R22 6R8 8R2 R24 R27 100 R29 R33 R39 R47	B = ±0.2nH S = ±0.3nH G = ±2% J = ±5% K = ±10% M = ±20%	

◆ OPERATING TEMPERATURE RANGE, PACKAGE QUANTITY.

Type	Temperature range		Reel Dimensions (mm)	Package quantity (pieces/reel)
	Operating Temperature °C	Storage Temperature °C		
SCI2520S-Series	-25 to +85	-25 to +85	ø180	2,000

## ◆ ELECTRICAL CHARACTERISTICS

2019/6/6

Inductance 50MHz (nH)	Inductance Tolerance	Q		RDC ( $\Omega$ ) Max	IDC (mA) max.	SRF (MHz) Min.	Part No.
		min	MHz				
4.7	B,S	60	1500	0.11	1000	>6000	SCI2520S-4N7□
10	G,J,K	60	500	0.08	1000	4100	SCI2520S-10N□
12	G,J,K	50	500	0.09	1000	3300	SCI2520S-12N□
15	G,J,K	50	500	0.17	1000	2500	SCI2520S-15N□
18	G,J,K	50	500	0.11	1000	2500	SCI2520S-18N□
22	G,J,K	50	350	0.12	1000	2400	SCI2520S-22N□
24	G,J,K	55	350	0.13	1000	2300	SCI2520S-24N□
27	G,J,K	55	350	0.13	1000	1600	SCI2520S-27N□
33	G,J,K	55	350	0.14	1000	1600	SCI2520S-33N□
39	G,J,K	60	350	0.15	1000	1500	SCI2520S-39N□
47	G,J,K	65	350	0.16	1000	1500	SCI2520S-47N□
56	G,J,K	65	350	0.18	1000	1300	SCI2520S-56N□
68	G,J,K	65	350	0.20	1000	1300	SCI2520S-68N□
82	G,J,K	65	350	0.22	1000	1000	SCI2520S-82N□

Inductance 25MHz (nH)	Inductance Tolerance	Q		RDC ( $\Omega$ ) Max	IDC (mA) max.	SRF (MHz) Min.	Part No.
		min	MHz				
100	G,J,K	60	350	0.56	650	1000	SCI2520S-R10□
120	G,J,K	60	350	0.63	650	950	SCI2520S-R12□
150	G,J,K	45	100	0.70	580	850	SCI2520S-R15□
180	G,J,K	45	100	0.77	620	750	SCI2520S-R18□
200	G,J,K	45	100	0.77	530	720	SCI2520S-R20□
220	G,J,K	45	100	0.84	500	700	SCI2520S-R22□
240	G,J,K	45	100	0.84	500	650	SCI2520S-R24□
270	G,J,K	45	100	0.91	500	600	SCI2520S-R27□
330	G,J,K	45	100	1.05	450	570	SCI2520S-R33□
390	G,J,K	45	100	1.12	470	500	SCI2520S-R39□
470	G,J,K	45	100	1.19	470	450	SCI2520S-R47□
530	G,J,K	45	100	1.30	400	430	SCI2520S-R53□
560	G,J,K	45	100	1.33	400	415	SCI2520S-R56□
620	G,J,K	45	100	1.40	300	375	SCI2520S-R62□
630	G,J,K	45	100	1.40	300	375	SCI2520S-R63□
680	G,J,K	45	100	1.47	400	375	SCI2520S-R68□
750	G,J,K	45	100	1.54	360	360	SCI2520S-R75□

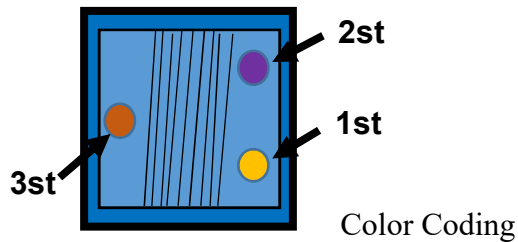
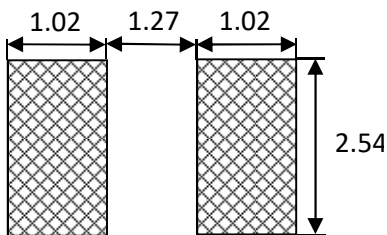
# SCI2520S-Series (SMD Wire-Wound Ceramic Chip Inductor For Signal Line) BINGRI

## ◆ ELECTRICAL CHARACTERISTICS

2019/6/6

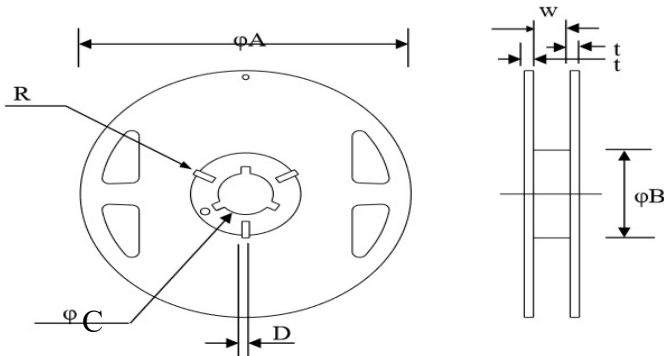
Inductance 25MHz (nH)	Inductance Tolerance	Q min	Q MHz	RDC ( $\Omega$ ) Max	IDC (mA) max.	SRF (MHz) Min.	Part No.
820	G,J,K	45	100	1.61	400	350	SCI2520S-R82□
910	G,J,K	35	50	1.68	380	320	SCI2520S-R91□
1000.0	G,J,K	35	50	1.75	370	290	SCI2520S-1R0□
Inductance 7.96MHz	Inductance Tolerance	Q min	Q MHz	RDC ( $\Omega$ ) Max	IDC (mA) max.	SRF (MHz) Min.	Part No.
1200	G,J,K	35	50	2.0	310	250	SCI2520S-1R2□
1500	G,J,K	28	50	2.3	330	200	SCI2520S-1R5□
1800	G,J,K	28	50	2.6	300	160	SCI2520S-1R8□
2200	G,J,K	28	50	2.8	280	160	SCI2520S-2R2□
2700	G,J,K	22	25	3.2	290	140	SCI2520S-2R7□
3300	G,J,K	22	25	3.4	290	110	SCI2520S-3R3□
3900	G,J,K	20	25	3.6	260	100	SCI2520S-3R9□
4700	G,J,K	20	25	4.0	260	90	SCI2520S-4R7□
5600	G,J,K	18	7.9	4.5	240	80	SCI2520S-5R6□
6800	G,J,K	18	7.9	4.9	200	60	SCI2520S-6R8□
8200	G,J,K	18	7.9	6.0	170	50	SCI2520S-8R2□
Inductance 2.52MHz	Inductance Tolerance	Q min	Q MHz	RDC ( $\Omega$ ) Max	IDC (mA) max.	SRF (MHz) Min.	Part No.
10000	G,J,K	18	7.9	8.0	150	40	SCI2520S-100□

## ◆ Recommended Soldering Conditions (Please use this product by reflow soldering)

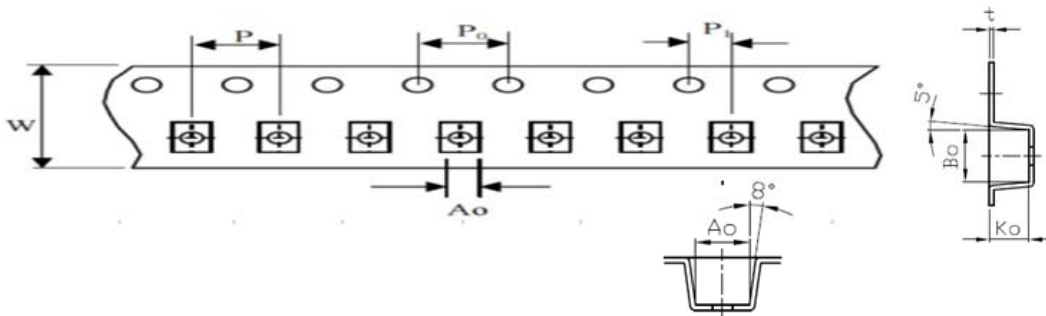


Solder Heat Resistance	Appearance: NO significant abnormality. Inductance change: Within+/-20%.	Preheat: 150°C, 60sec. Solder temperature: 260±5°C Flux for lead :rosin Dip time: 10±0.5sec															
Solder ability Test	More than 90% of the terminal electrode Should be covered with solder.	Preheat: 150°C, 60sec. Solder temperature: 230±5°C Flux for lead :rosin Dip time: 4±1sec															
Reliability Test																	
High Temperature Life Test	Appearance: no damage. Inductance: within+/-20%of initial value. No disconnection or short circuit.	Temperature: 85±5°C. Duration: 500±12hrs Measured at room temperature after placing for 2 to 3hrs.															
Low Temperature Life Test	Appearance: no damage Inductance: within+/-20%of initial value. No disconnection or short circuit.	Temperature: -40±5°C. Duration: 500±12hrs Measured at room temperature after placing for 2 to 3hrs. 測試後室溫放置2-3小時，才可以測試電氣特性。															
Thermal shock	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">階段</th> <th style="width: 30%;">溫度°C</th> <th style="width: 25%;">時間 (分)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">-40±3°C</td> <td style="text-align: center;">30±3</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">常溫</td> <td style="text-align: center;">Within3</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">+85±3°C</td> <td style="text-align: center;">30±3</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">常溫</td> <td style="text-align: center;">Within3</td> </tr> </tbody> </table>	階段	溫度°C	時間 (分)	1	-40±3°C	30±3	2	常溫	Within3	3	+85±3°C	30±3	4	常溫	Within3	Condition for 1 cycle Step1: -40±3°C 30±3 min. Step2: Room Temperature within 3min. Step3: +85±3°C 30±3min Step4: Room Temperature within 3min. Number of cycles: 10 測試後室溫放置2-3小時，才可以測試電氣特性。
階段	溫度°C	時間 (分)															
1	-40±3°C	30±3															
2	常溫	Within3															
3	+85±3°C	30±3															
4	常溫	Within3															
Humidity Resistance	Appearance: no damage Inductance: within+/-20%of initial value. No disconnection or short circuit.	Humidity: 90-95%RH Temperature: 60±5°C Applied current: Rated current. Duration: 500±12hrs. 放置時間：500±12hrs Measured at room temperature after placing for 2 to 3hrs. 測試後室溫放置2-3小時，才可以測試電氣特性。															

## ◆ Reel Dimension & Tape Dimension



Type	A(mm)	B(mm)	C(mm)	W(mm)
7"x8mm	178±1.0	60±0.5	13.5±0.5	9.5±0.5



PN	Size	W(mm)	P(mm)	Po(mm)	P1(mm)	A0(mm)	B0(mm)	K0(mm)	t(mm)
SFI1608P	1608	8±0.1	4±0.1	4±0.1	2±0.05	1.3±0.1	1.8±0.1	1.1±0.1	0.2±0.05
SCI2012S	2012	8±0.1	4±0.1	4±0.1	2±0.05	1.85±0.1	2.5±0.1	1.7±0.1	0.23±0.05
SFI2012P	2012	8±0.1	4±0.1	4±0.1	2±0.05	1.6±0.1	2.5±0.1	1.25±0.1	0.22±0.05
SCI2520S	2520	8±0.1	4±0.1	4±0.1	2±0.05	2.61±0.1	2.93±0.1	2.25±0.1	0.26±0.05
SFI1608S	1608	8±0.1	4±0.1	4±0.1	2±0.05	1.15±0.1	1.83±0.1	0.95±0.1	0.22±0.05

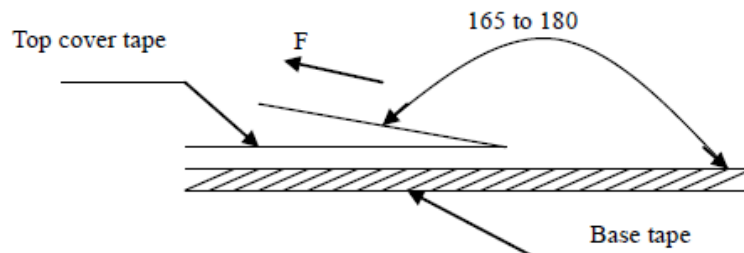
The force for tearing off cover tape is 15 to 60 grams in the arrow direction at the following conditions:

Temperature : 5 ~ 35°C

Humidity : 45 ~ 85%

Atmospheric pressure : 860 ~ 1060 hpz

Tearing Speed: 300Mm/min



## ◆ Packaging Quantity

Chip Size	1608	2012	2520
8mm / Reel	2K/3K/4K	2K/3K	2K