

SMD Wire-Wound Ceramic Chip Inductor For Signal Line

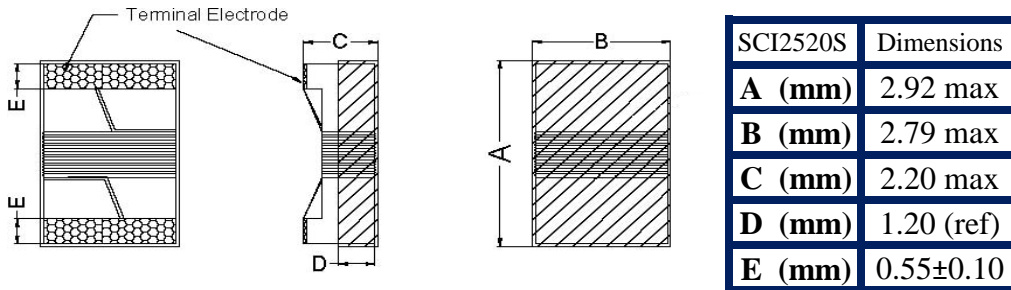
Wire wound ceramic chip inductor offers the overall combination of low cost, close tolerance, better Q factor and high self-resonant multiplayer chip inductor.

SCI S-Series

SCI2520S type

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 2.5/7.9/25/50MHz	Inductance Tolerance	Taping
SMD Ceramic Inductor	2.9*2.7*2.2			4N7 7N5 30N 36N 10N 8N2 39N 43N 12N 8N7 47N 51N 2N2 9N5 56N 68N 3N3 10N 72N 82N 3N6 11N R10 R11 3N9 12N R12 R15 4N3 15N R18 R20 4N7 16N R22 R25 5N1 18N R27 R33 5N6 22N R39 R47 6N2 24N R56 6N8 27N	B = ±0.2nH S = ±0.3nH G = ±2% J = ±5% K = ±10% M = ±20%	

◆ OPERATING TEMPERATURE RANGE, PACKAGE QUANTITY.

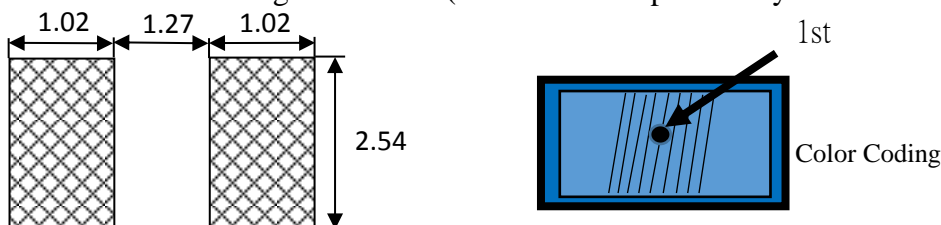
Type	Temperature range		Reel Dimensions (mm)	Package quantity (pieces/reel)
	Operating Temperature °C	Storage Temperature °C		
SCI2520S-Series	-25 to +85	-25 to +85	ø180	3,000

◆ ELECTRICAL CHARACTERISTICS

Inductance 50MHz (nH)	Inductance Tolerance	Q min	Q MHz	RDC (Ω) Max	IDC (mA) max.	SRF (MHz) Min.	Part No.
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 min	Q MHz	RDC (Ω) Max	IDC (mA) max.	SRF (MHz) Min.	Part No.
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	1.22	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□

◆ Recommended Soldering Conditions (Please use this product by reflow



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

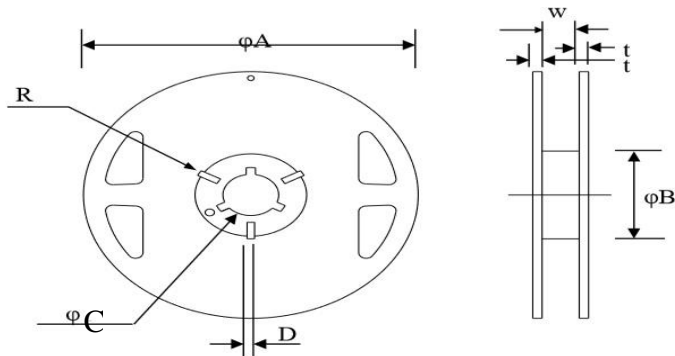


◆ ELECTRICAL CHARACTERISTICS

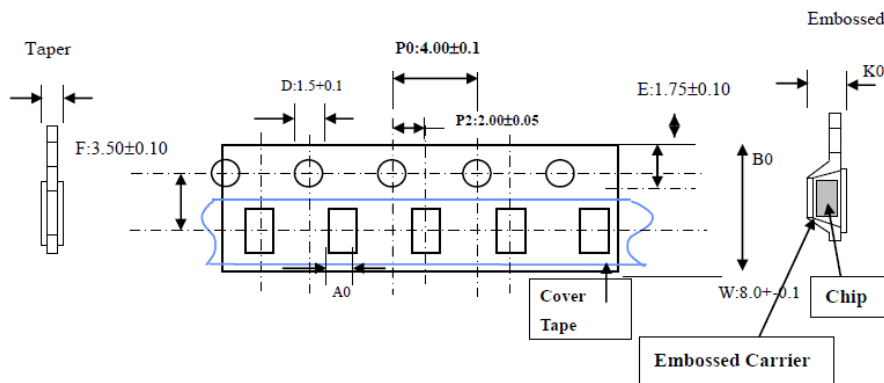
Inductance 25MHz (nH)	Inductance Tolerance	Q		RDC (Ω) Max	IDC (mA) max.	SRF (MHz) Min.	Part No.
		min	MHz				
820	G,J,K	45	100	1.61	400	350	SCI2520S-R82□
910	G,J,K	35	50	1.68	380	320	SCI2520S-R91□
1000.0	G,J,K	35	50	1.75	370	290	SCI2520S-1R0□
Inductance 7.9MHz (nH)	Inductance Tolerance	Q		RDC (Ω) Max	IDC (mA) max.	SRF (MHz) Min.	Part No.
		min	MHz				
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	2.4	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 2.5MHz (nH)	Inductance Tolerance	Q		RDC (Ω) Max	IDC (mA) max.	SRF (MHz) Min.	Part No.
		min	MHz				
10000	G,J,K	18	7.9	8.0	150	40	SCI2520S-100□

Solder Heat Resistance	Appearance: NO significant abnormality.	Preheat:150°C,60sec.		
	Inductance change: Within+-20%.	Solder temperature:260+-5°C Flux for lead :rosin Dip time:10+-0.5sec		
Solder ability Test	More than 90% of the terminal electrode	Preheat: 150°C,60sec.		
	Should be covered with solder.	Solder tamperature: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	階段	溫度°C	時間（分）	Condition for 1 cycle
	1	-40+-3°C	30+-3	Step1:-40+-3°C 30+-3 min.
	2	常溫	Within3	Step2: Room Temperature within 3min.
	3	+85+-33°C	30+-3	Step3:+85+-3°C 30+-3min
	4	常溫	Within3	Step4: Room Temperature within 3min.
測試性能同上			Number of cycles:10 測試後室溫放置2-3小時，才可以測試電氣特性.	
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



Size	B0(mm)	A0(mm)	K0(mm)
1608	1.80±0.10	1.30±0.10	1.25±0.10
2012	2.50±0.10	1.60±0.10	1.25±0.10
2520	2.93±0.05	2.61±0.05	2.25±0.05

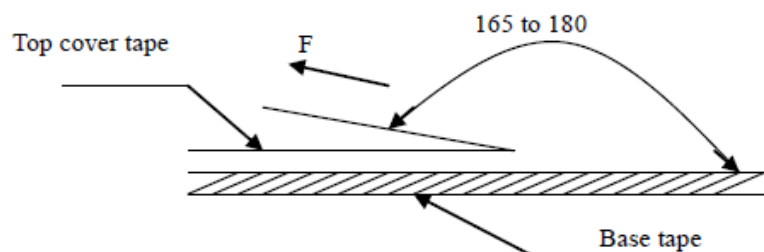
The force for tearing off cover tape is 15 to 60 grams in the arrow direction at the following conditions:

Temperature : 5 ~ 35°C

Humidity : 45 ~ 85%

Atmospheric pressure : 860 ~ 1060 hpa

Tearing Speed: 300Mm/min



◆ Packaging Quantity

Chip Size	1608	2012	2520
8mm / Reel	2000/3000	2000/3000	2000