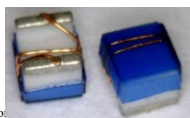


Features & Application

- Higher Q and lower DCR than other 1008 inductors
- Very high SRF values – as high as 6.x GHz
- Excellent current handling capability – up to 1000 mA
- 56 inductance values from 4.7 to 10000 nH



Core material Ceramic

Environmental RoHS compliant, halogen free

Terminations Silver-palladium-platinum-glass frit. Other terminations available at additional cost.

Ambient temperature -40°C to +125°C with Irms current

Maximum part temperature +140°C (ambient + temp rise).

Storage temperature Component: -40°C to +140°C.

Tape and reel packaging: -40°C to

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Temperature Coefficient of Inductance (TCL) +25 to +125 ppm/°C

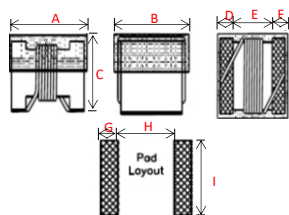
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C /

85% relative humidity)

★ When ordering, please check part number

Part number	Inductance 50MHz (nH)	Inductance Tolerance	Q min	MHz	RDC (Ω) Max	IRMS (mA)	SRF (GHz) Min.
SCI2520S-4N7	4.7	B,S	60	1500	0.11	1000	>6.0
SCI2520S-10N	10.0	G,J,K	60	500	0.08	1000	4.10
SCI2520S-12N	12.0	G,J,K	50	500	0.09	1000	3.30
SCI2520S-15N	15.0	G,J,K	50	500	0.17	1000	2.50
SCI2520S-18N	18.0	G,J,K	50	500	0.11	1000	2.50
SCI2520S-22N	22.0	G,J,K	50	350	0.12	1000	2.40
SCI2520S-24N	24.0	G,J,K	55	350	0.13	1000	2.30
SCI2520S-27N	27.0	G,J,K	55	350	0.13	1000	1.60
SCI2520S-33N	33.0	G,J,K	55	350	0.14	1000	1.60
SCI2520S-39N	39.0	G,J,K	60	350	0.15	1000	1.50
SCI2520S-47N	47.0	G,J,K	65	350	0.16	1000	1.50
SCI2520S-56N	56.0	G,J,K	65	350	0.18	1000	1.30
SCI2520S-68N	68.0	G,J,K	65	350	0.20	1000	1.30
SCI2520S-82N	82.0	G,J,K	65	350	0.22	1000	1.00
Part No.	Inductance 25MHz (nH)	Inductance Tolerance	Q min	MHz	RDC(Ω) Max	IRMS (mA)	SRF (GHz) Min.
SCI2520S-R10	100	G,J,K	60	350	0.56	650	1.00
SCI2520S-R12	120	G,J,K	60	350	0.63	650	0.95
SCI2520S-R15	150	G,J,K	45	100	0.70	580	0.85
SCI2520S-R18	180	G,J,K	45	100	0.77	620	0.75
SCI2520S-R20	200	G,J,K	45	100	0.77	530	0.72
SCI2520S-R22	220	G,J,K	45	100	0.84	500	0.70
SCI2520S-R24	240	G,J,K	45	100	0.84	500	0.65
SCI2520S-R27	270	G,J,K	45	100	0.91	500	0.60
SCI2520S-R33	330	G,J,K	45	100	1.05	450	0.57
SCI2520S-R39	390	G,J,K	45	100	1.12	470	0.50
SCI2520S-R47	470	G,J,K	45	100	1.19	470	0.45
SCI2520S-R53	530	G,J,K	45	100	1.30	400	0.43
SCI2520S-R56	560	G,J,K	45	100	1.33	400	0.42
SCI2520S-R62	620	G,J,K	45	100	1.40	300	0.38
SCI2520S-R63	630	G,J,K	45	100	1.40	300	0.38
SCI2520S-R68	680	G,J,K	45	100	1.47	400	0.38
SCI2520S-R75	750	G,J,K	45	100	1.54	360	0.36
SCI2520S-R82	820	G,J,K	45	100	1.61	400	0.35
SCI2520S-R91	910	G,J,K	35	50	1.68	380	0.32
SCI2520S-1R0	1000	G,J,K	35	50	1.75	370	0.29
Part No.	Inductance 7.96MHz (nH)	Inductance Tolerance	Q min	MHz	RDC(Ω) Max	IRMS (mA)	SRF (GHz) Min.
SCI2520S-1R2	1200	G,J,K	35	50	2.00	310	0.25
SCI2520S-1R5	1500	G,J,K	28	50	2.30	330	0.20
SCI2520S-1R8	1800	G,J,K	28	50	2.60	300	0.16
SCI2520S-2R2	2200	G,J,K	22	25	2.80	280	0.16
SCI2520S-2R7	2700	G,J,K	22	25	3.20	290	0.14
SCI2520S-3R3	3300	G,J,K	20	25	3.40	290	0.11
SCI2520S-3R9	3900	G,J,K	20	25	3.60	260	0.10
SCI2520S-4R7	4700	G,J,K	20	25	4.00	260	0.09
SCI2520S-5R6	5600	G,J,K	18	7.9	4.50	240	0.08
SCI2520S-6R8	6800	G,J,K	18	7.9	4.98	200	0.06
SCI2520S-8R2	8200	G,J,K	18	7.9	6.00	170	0.05
Part No.	Inductance 2.52MHz (nH)	Inductance Tolerance	Q min	MHz	RDC(Ω) Max	IRMS (mA)	SRF (GHz) Min.
SCI2012S-100	10000	G,J,K	18	7.9	8.00	150	0.04

Isolation (Vrms) : 250V. Winding to winding isolation (hipot) tested for one minute.



Dimensions	
A	2.92 MAX
B	2.79 MAX
C	2.20 MAX
D	0.56 TYP
E	1.80 TYP
F	0.56 TYP
G	1.02 TYP
H	1.27 TYP
I	2.54 TYP
unit : mm	

Impedance/Inductance/Q/ LCR Angilent E4991A

Resistance DC Chroma 16502

Current per winding that causes a 20°C rise from 25°C ambient

Electrical specifications at 25°C

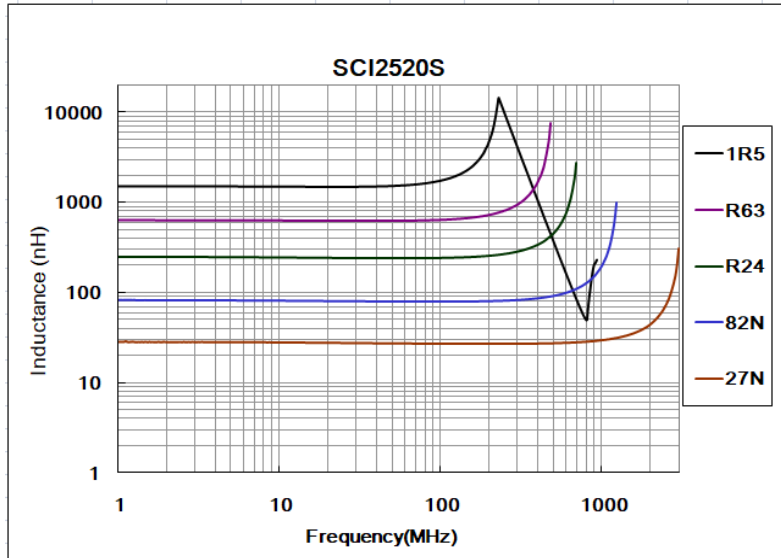
Weight 26.6 – 37.5 mg

Packaging 2000/7 " reel; Plastic tape; 8 mm wide.

Packaging will different, according to the various chip size.

Contact Us	
US	sales-us@bing-ri.com.tw
Taiwan	sales-tw@bing-ri.com.tw
China	sales-cn@bing-ri.com.tw
Japan	sales-jp@bing-ri.com.tw
Official Website :	
https://www.bing-ri.com.tw/	

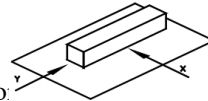
Typical Inductance vs Frequency



GENERAL CHARACTERISTICS

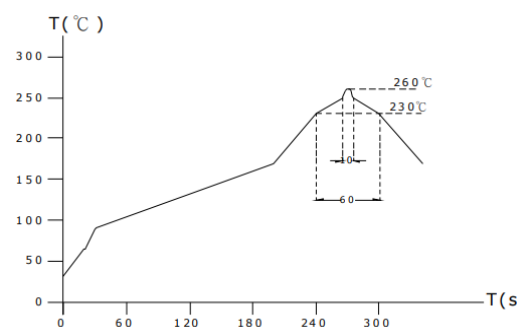
1. Operating temperature range: -40 TO + 125 °C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions.

Terminal should not peel off. (refer to figure at right) 0.5kg Min -2520



4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core
6. Temperature characteristics: Inductance coefficient $(0 \sim 2,000) \times 10^{-6} / (^\circ\text{C} -25 \sim +80)$. °C , inductance deviation within $\pm 5.0\%$, after 96 hours.
7. Humidity characteristics (Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in 90~95% relative humidity at 40 ± 2 and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within $\pm 5\%$, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s² (100G) shock attitude upon a rubber block method shock testing machine, in three different
10. Resistance to Soldering Heat: 260 , 10 seconds (See attached recommend reflow)
11. Storage environment: Storage condition: Temperature Range: 10 ~ 35 (Generally: 21 ~ 31) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35 ~ 85 , Humidity Range: 50% ~ 95% RH
12. Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
13. Reflow profile recommend:

Lead-free heat endurance test



Lead-free the recommended reflow condition

