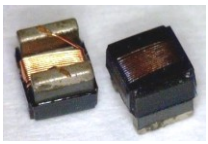
Chip Inductors - 2520S-Series (1008)

BINGRI TECH

Features & Application

2020/1/1

- Higher inductance values than other 1008 inductors
- Ferrite construction for high current handling
- Inductance values: 0.27 uH – 100 µH; 10%and 20% toleran



Core material Ferrite

Environmental RoHS compliant, halogen free

Terminations Silver-palladium-platinum-glass frit. Other termination 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

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

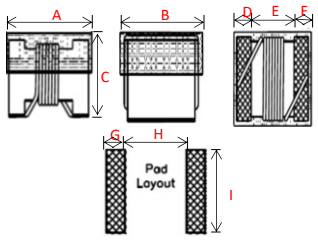
Temperature Coefficient of Inductance (TCL) +25 to +125 ppm/°C

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

★ When ordering, please check part number

Part number	Inductance 25.2MHz (uH)	Inductance Tolerance	Q (min) 25.2MHz	RDC (Ω) Max	IRMS (mA)	SRF (GHz) Min.
SFI2520S-R27□T	0.27	J,K	35	0.700	1000	0.600
SFI2520S-R39□T	0.39	J,K	30	0.65	950	0.550
SFI2520S-R47□T	0.47	J,K	30	0.65	900	0.500
SFI2520S-R56□T	0.56	J,K	30	0.70	800	0.450
SFI2520S-R68□T	0.68	J,K	25	0.75	750	0.400
SFI2520S-R82□T	0.82	J,K	25	0.75	700	0.380
Part number	Inductance 7.96MHz (uH)	Inductance Tolerance	Q (min) 7.96MHz	RDC (Ω) Max	IRMS (mA)	SRF (GHz) Min.
SFI2520S-1R0□T	1.00	J,K	25	0.80	650	0.330
SFI2520S-1R2□T	1.20	J,K	25	0.87	600	0.265
SFI2520S-1R5□T	1.50	J,K	25	0.98	550	0.235
SFI2520S-1R8□T	1.8	J,K	25	1.10	500	0.226
SFI2520S-2R2□T	2.2	J,K	25	1.22	450	0.198
SFI2520S-2R7□T	2.7	J,K	25	1.33	400	0.180
SFI2520S-3R3□T	3.3	J,K	25	1.46	400	0.143
SFI2520S-3R9□T	3.9	J,K	25	1.63	380	0.136
SFI2520S-4R7□T	4.7	J,K	25	1.76	350	0.105
SFI2520S-5R6□T	5.6	J,K	25	1.79	330	0.088
SFI2520S-6R8□T	6.8	J,K	25	1.97	300	0.056
SFI2520S-8R2□T	8.2	J,K	25	2.03	280	0.048
SFI2520S-100□T	10.0	J,K	25	2.92	250	0.044
SFI2520S-120□T	12.0	J,K	25	3.11	220	0.042
SFI2520S-150□T	15.0	J,K	25	3.58	200	0.037
Part number	Inductance 2.52MHz (uH)	Inductance Tolerance	Q (min) 2.52MHz	RDC (Ω) Max	IRMS (mA)	SRF (GHz) Min.
SFI2520S-180□T	18.0	J,K	20	3.89	180	0.032
SFI2520S-220□T	22.0	J,K	20	4.38	140	0.028
SFI2520S-270□T	27.0	J,K	20	4.92	130	0.024
SFI2520S-330□T	33.0	J,K	20	5.50	125	0.022
SFI2520S-390□T	39.0	J,K	20	7.51	110	0.020
SFI2520S-470□T	47.0	J,K	20	8.34	100	0.018
SFI2520S-560□T	56.0	J,K	20	9.18	95	0.016
SFI2520S-680□T	68.0	J,K	20	9.61	90	0.014
SFI2520S-820□T	82.0	J,K	20	11.54	80	0.012
SFI2520S-101□T	100.0	J,K	20	13.00	60	0.008

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	0.65 TYP
E	1.62 TYP
F	0.65 TYP
G	1.02 TYP
H	1.20 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 ambi
Electrical specifications at 25°C

Weight 33.8 – 39.9 mg

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

Packaging will different,accroding the various chip size.

Contact Us	
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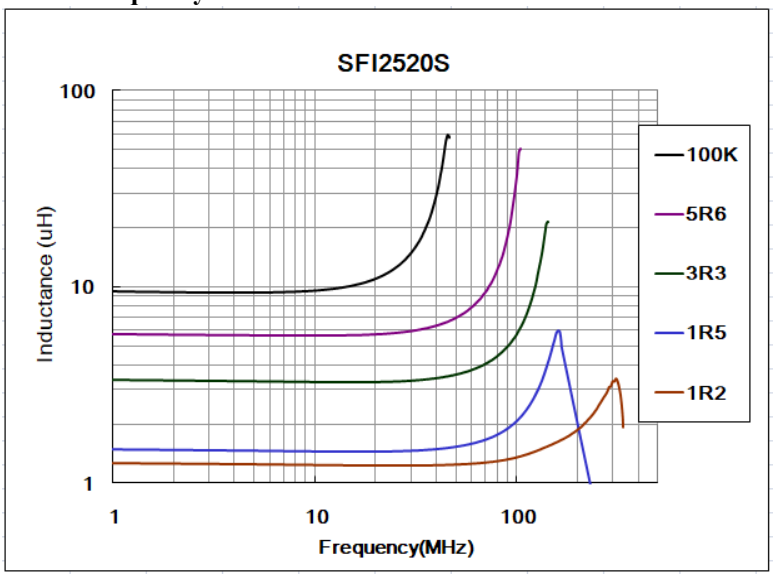
Official Website :
https://www.bing-ri.com.tw/

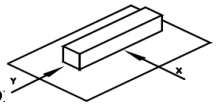
Typical Inductance vs Frequency



GENERAL CHARACTERISTICS

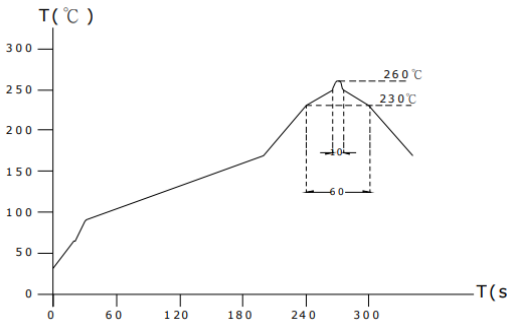
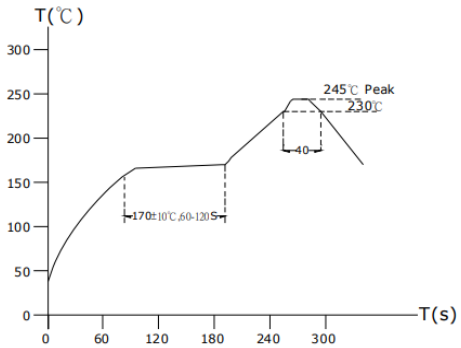
1. Operating temperature range: -40 TO + 125℃(Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Ywithstanding at below 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 co
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core
6. Temperature characteristics: Inductance coefficient (0~2,000)x10-6/ (℃ -25~+80). ℃ , inductance deviation within±5.0%, after 96 hours.
7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±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 ±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 ±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 soldarability before use.
13. Reflow profile recommend:

Lead-free heat en duran ce test



Lead-free the recommended reflow condition