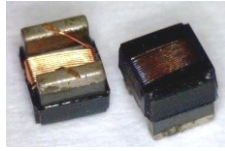


Features & Application

- Higher inductance values than other 0805 inductors
- Ferrite construction for high current handling
- Inductance values: 0.18H – 33 μ H; 10% and 20% tolerance



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

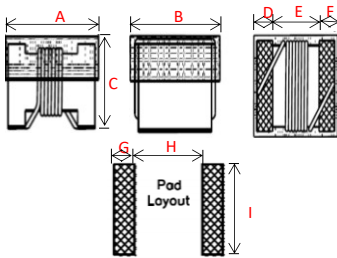
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C /

85% relative humidity)

★ When ordering, please check part number

Part number	Inductance 25.2MHz (uH)	Inductance Tolerance	Q (min) 100MHz	RDC (Ω) Max	IRMS (mA)	SRF (GHz) Min.
SFI2012S-R18□T	0.180	J,K	30	0.340	700	0.850
SFI2012S-R27□T	0.270	J,K	30	0.43	660	0.660
SFI2012S-R47□T	0.47	J,K	30	0.54	650	0.570
SFI2012S-R56□T	0.56	J,K	30	0.64	600	0.560
SFI2012S-R68□T	0.68	J,K	30	0.68	590	0.480
SFI2012S-R82□T	0.82	J,K	30	0.77	550	0.449
Part number	Inductance 7.96MHz (uH)	Inductance Tolerance	Q (min) 25.2MHz	RDC (Ω) Max	IRMS (mA)	SRF (GHz) Min.
SFI2012S-1R0□T	1.00	J,K	30	0.86	500	0.394
SFI2012S-1R2□T	1.20	J,K	25	0.97	460	0.297
SFI2012S-1R5□T	1.5	J,K	25	1.08	440	0.206
SFI2012S-1R8□T	1.8	J,K	25	1.18	420	0.177
SFI2012S-2R2□T	2.2	J,K	20	1.32	400	0.141
SFI2012S-2R7□T	2.7	J,K	20	1.42	380	0.128
SFI2012S-3R3□T	3.3	J,K	15	1.73	330	0.110
SFI2012S-3R9□T	3.9	J,K	15	1.72	300	0.103
SFI2012S-4R7□T	4.7	J,K	15	1.87	280	0.098
Part number	Inductance 7.96MHz (uH)	Inductance Tolerance	Q (min) 7.96MHz	RDC (Ω) Max	IRMS (mA)	SRF (GHz) Min.
SFI2012S-5R6□T	5.6	J,K	15	2.2	270	0.096
SFI2012S-6R8□T	6.8	J,K	15	2.9	260	0.082
SFI2012S-8R2□T	8.2	J,K	15	3.3	245	0.064
SFI2012S-10□T	10.0	J,K	10	3.7	200	0.056
SFI2012S-12□T	12	J,K	10	4.2	190	0.048
Part number	Inductance 2.52MHz (uH)	Inductance Tolerance	Q (min) 2.52MHz	RDC (Ω) Max	IRMS (mA)	SRF (GHz) Min.
SFI2012S-15□T	15	J,K	10	4.6	180	0.040
SFI2012S-18□T	18	J,K	10	4.8	170	0.030
SFI2012S-22□T	22	J,K	10	5.0	160	0.022
SFI2012S-27□T	27	J,K	10	5.6	150	0.019
SFI2012S-33□T	33	J,K	10	6.8	100	0.015

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



Dimensions	
A	2.40 MAX
B	1.60 MAX
C	1.40 MAX
D	0.55 TYP
E	1.30 TYP
F	0.55 TYP
G	1.02 TYP
H	0.76 TYP
I	1.78 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 10.7 – 12.2 mg.

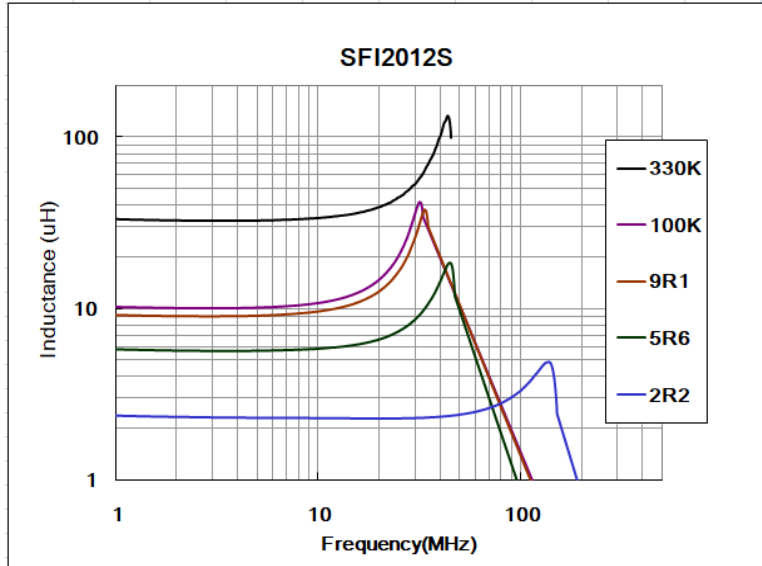
Packaging 2000/7 # reel; Plastic tape: 8 mm wide.

Packaging will different, according to the various chip size.

Contact Us	
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Japan	sales-jp@bing-ri.com.tw

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

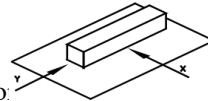
Typical Inductance vs Frequency



GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO $+125^{\circ}\text{C}$ (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 –2012



4. Insulating resistance: Over $100\text{M}\Omega$ 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 $(0\sim 2,000)\times 10^{-6}/(^{\circ}\text{C } -25\sim +80)$. $^{\circ}\text{C}$, inductance deviation within $\pm 5.0\%$, after 96 hours.
7. Humidity characteristics(Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in $90\sim 95\%$ 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 ($10\sim 55\sim 10$ Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s^2 (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: $10 \sim 35$ (Generally: $21 \sim 31$), Humidity Range: $50\% \sim 80\%$ RH (Generally: $65\% \sim 75\%$); Transportation condition: Temperature Range: $-35 \sim 85$, Humidity Range: $50\% \sim 95\%$ 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 en duran ce test

Lead-free the recommended reflow condition

