

Features & Application

- Higher inductance values than other 0603 inductors
- Ferrite construction for high current handling
- Inductance values: 47 nH – 22 μ H; 5%, 10% and 20% tolerances

Core material Ferrite

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

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

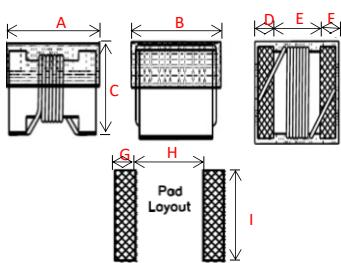
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C /

85% relative humidity)

★ When ordering, please check part number

Part number	Inductance 7.96MHz (uH)	Inductance Tolerance	Q 7.96MHz	RDC (Ω) Max	IRMS (mA)	SRF (GHz) Min.
SFI1608P-47N□T	0.047	K,M	10	0.075	1500	1.700
SFI1608P-72N□T	0.072	K,M	10	0.12	1500	1.700
SFI1608P-R10□T	0.10	K,M	10	0.13	1400	1.150
SFI1608P-R12□T	0.12	K,M	10	0.15	1400	1.100
SFI1608P-R15□T	0.15	K,M	10	0.15	1300	1.050
SFI1608P-R18□T	0.18	K,M	10	0.15	950	0.950
SFI1608P-R22□T	0.22	K,M	10	0.15	710	0.800
SFI1608P-R27□T	0.27	K,M	10	0.20	620	0.775
SFI1608P-R33□T	0.33	K,M	10	0.35	600	0.725
SFI1608P-R39□T	0.39	K,M	10	0.39	570	0.620
SFI1608P-R47□T	0.47	K,M	10	0.43	550	0.540
SFI1608P-R56□T	0.56	K,M	10	0.47	470	0.525
SFI1608P-R68□T	0.68	K,M	10	0.68	400	0.460
SFI1608P-R82□T	0.82	K,M	10	0.80	400	0.410
SFI1608P-1R0□T	1.00	J,K	10	0.81	370	0.190
SFI1608P-1R2□T	1.20	J,K	10	0.87	350	0.160
SFI1608P-1R5□T	1.50	J,K	10	0.96	350	0.100
SFI1608P-1R8□T	1.80	J,K	10	1.1	320	0.080
SFI1608P-2R2□T	2.20	J,K	10	1.2	290	0.068
SFI1608P-2R7□T	2.70	J,K	10	1.3	280	0.050
SFI1608P-3R3□T	3.30	J,K	10	1.5	280	0.042
SFI1608P-3R9□T	3.90	J,K	10	1.6	270	0.040
SFI1608P-4R2□T	4.20	J,K	10	2.0	260	0.036
SFI1608P-4R7□T	4.70	J,K	10	2.1	240	0.034
SFI1608P-5R6□T	5.60	J,K	10	2.6	200	0.032
SFI1608P-6R8□T	6.80	J,K	10	3.1	190	0.031
SFI1608P-8R2□T	8.20	J,K	10	4.4	400	0.026
Part number	Inductance 2.52MHz (uH)	Inductance Tolerance	Q min MHz	RDC (Ω) Max	IRMS (mA)	SRF (GHz) Min.
SFI1608P-100□T	10	J,K	10	4.8	180	0.025
SFI1608P-150□T	15	J,K	10	6.8	130	0.020
SFI1608P-180□T	18	J,K	10	6.8	100	0.016
SFI1608P-220□T	22	J,K	10	8.0	80	0.013

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



Dimensions	
A	1.80 MAX
B	1.20 MAX
C	1.20 MAX
D	0.45 TYP
E	0.90 TYP
F	0.45 TYP
G	0.64 TYP
H	0.64 TYP
I	1.02 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 4.2 – 7.3 mg.

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

Packaging will different, according the various chip size.

Contact Us

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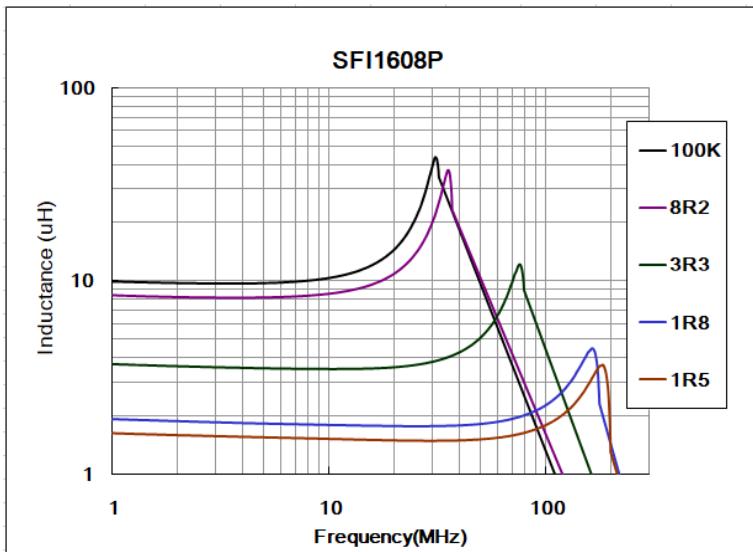
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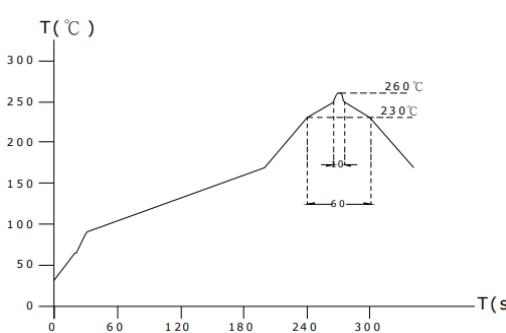
Typical Inductance vs Frequency



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.Ywithstanding at below conditions.
Terminal should not peel off. (refer to figure at right) 0.5kg Min -1608
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 $(0\sim 2,000)\times 10^{-6}$ / (°C -25~+80). °C , 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 solderability before use.
13. Reflow profile recommend:

Lead-free heat endurance test



Lead-free the recommended reflow condition

