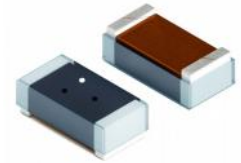


Ceramic Chip Inductor (2.4 x 1.6 x 1.4 mm)
FEATURES

- Miniature SMD Package
- High SRF
- High Frequency
- High Q value


SPECIFICATION

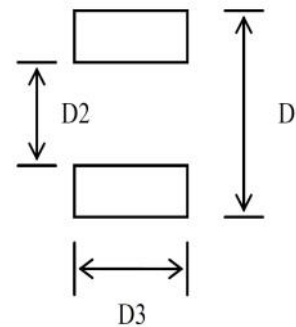
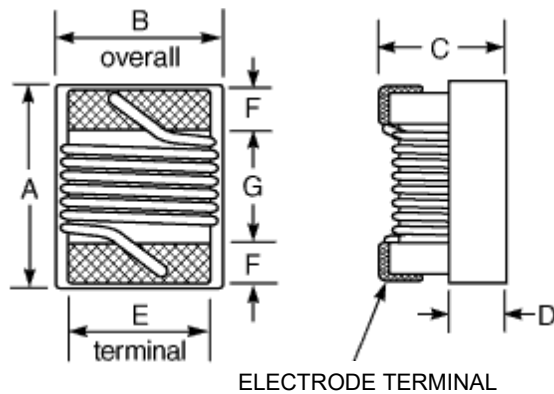
Part Number	L (nH) / @MHz	Inductance tolerance	Q min /@MHz	SRF(MHz) min.	DCR (Ω) Max	Irms (mA) Max
TCFL0805CF-2N2_	2.2 / 250	K	50 / 1000	7900	0.05	800
TCFL0805CF-2N7_	2.7 / 250	J, K	50 / 1500	7900	0.06	800
TCFL0805CF-2N8_	2.8 / 250	J, K	55 / 1500	7900	0.06	800
TCFL0805CF-3N0_	3.0 / 250	J, K	55 / 1500	7900	0.08	800
TCFL0805CF-3N3_	3.3 / 250	J, K	45 / 1500	7900	0.12	600
TCFL0805CF-5N1_	5.1 / 250	J, K	60 / 1000	5800	0.06	600
TCFL0805CF-5N6_	5.6 / 250	J, K	65 / 1000	5500	0.08	600
TCFL0805CF-6N2_	6.2 / 250	J, K	65 / 1000	5500	0.11	600
TCFL0805CF-6N8_	6.8 / 250	J, K	50 / 1000	5500	0.11	600
TCFL0805CF-7N5_	7.5 / 250	J, K	50 / 1000	4500	0.14	600
TCFL0805CF-8N2_	8.2 / 250	J, K	50 / 1000	4700	0.16	600
TCFL0805CF-10N_	10 / 250	G, J, K	60 / 500	4200	0.10	600
TCFL0805CF-12N_	12 / 250	G, J, K	50 / 500	4000	0.15	600
TCFL0805CF-15N_	15 / 250	G, J, K	50 / 500	3400	0.17	600
TCFL0805CF-18N_	18 / 250	G, J, K	50 / 500	3300	0.20	600
TCFL0805CF-22N_	22 / 250	G, J, K	55 / 500	2600	0.22	500
TCFL0805CF-24N_	24 / 250	G, J, K	50 / 500	2000	0.22	500
TCFL0805CF-27N_	27 / 250	G, J, K	55 / 500	2500	0.25	500
TCFL0805CF-33N_	33 / 250	G, J, K	60 / 500	2050	0.27	500
TCFL0805CF-36N_	36 / 250	G, J, K	55 / 500	1700	0.27	500
TCFL0805CF-39N_	39 / 250	G, J, K	60 / 500	2000	0.29	500
TCFL0805CF-43N_	43 / 200	G, J, K	60 / 500	1650	0.34	500
TCFL0805CF-47N_	47 / 200	G, J, K	60 / 500	1650	0.31	500
TCFL0805CF-56N_	56 / 200	G, J, K	60 / 500	1550	0.34	500
TCFL0805CF-68N_	68 / 200	G, J, K	60 / 500	1450	0.38	500
TCFL0805CF-75N_	75 / 200	G, J, K	60 / 500	1400	0.40	400
TCFL0805CF-82N_	82 / 150	G, J, K	65 / 500	1300	0.42	400
TCFL0805CF-91N_	91 / 150	G, J, K	65 / 500	1200	0.48	400
TCFL0805CF-R10_	100 / 150	G, J, K	65 / 500	1200	0.46	400
TCFL0805CF-R11_	110 / 150	G, J, K	50 / 250	1000	0.48	400
TCFL0805CF-R12_	120 / 150	G, J, K	50 / 250	1100	0.51	400
TCFL0805CF-R15_	150 / 100	G, J, K	50 / 250	920	0.56	400
TCFL0805CF-R16_	160 / 100	G, J, K	50 / 250	900	0.60	400
TCFL0805CF-R18_	180 / 100	G, J, K	50 / 250	870	0.64	400
TCFL0805CF-R20_	200 / 100	G, J, K	50 / 250	865	0.68	400
TCFL0805CF-R22_	220 / 100	G, J, K	50 / 250	850	0.70	400
TCFL0805CF-R24_	240 / 100	G, J, K	44 / 250	690	1.00	350
TCFL0805CF-R25_	250 / 100	G, J, K	48 / 250	680	1.00	350
TCFL0805CF-R27_	270 / 100	G, J, K	48 / 250	650	1.00	350

Part Number	L (nH) / @MHz	Inductance tolerance	Q min /@MHz	SRF(MHz) min.	DCR (Ω) Max	I _{rms} (mA) Max
TCFL0805CF-R33_	330 / 100	G, J, K	48 / 250	750	1.40	310
TCFL0805CF-R39_	390 / 100	G, J, K	48 / 250	560	1.50	290
TCFL0805CF-R47_	470 / 50	G, J, K	30 / 100	375	1.76	250
TCFL0805CF-R56_	560 / 25	G, J, K	23 / 50	340	1.90	230
TCFL0805CF-R62_	620 / 25	G, J, K	23 / 50	220	2.20	210
TCFL0805CF-R68_	680 / 25	G, J, K	23 / 50	188	2.20	190
TCFL0805CF-R75_	750 / 25	G, J, K	23 / 50	200	2.30	180
TCFL0805CF-R82_	820 / 25	G, J, K	23 / 50	215	2.35	180
TCFL0805CF-1R0_	1000 / 25	G, J, K	22 / 50	200	2.45	180
TCFL0805CF-1R5_	1500 / 7.9	G, J, K	16 / 7.9	120	2.50	170
TCFL0805CF-1R8_	1800 / 7.9	G, J, K	16 / 7.9	80	2.50	170
TCFL0805CF-2R2_	2200 / 7.9	G, J, K	16 / 7.9	60	2.70	160
TCFL0805CF-2R7_	2700 / 7.9	G, J, K	16 / 7.9	50	3.80	160
TCFL0805CF-4R7_	4700 / 7.9	J, K	10 / 7.9	40	15.0	130

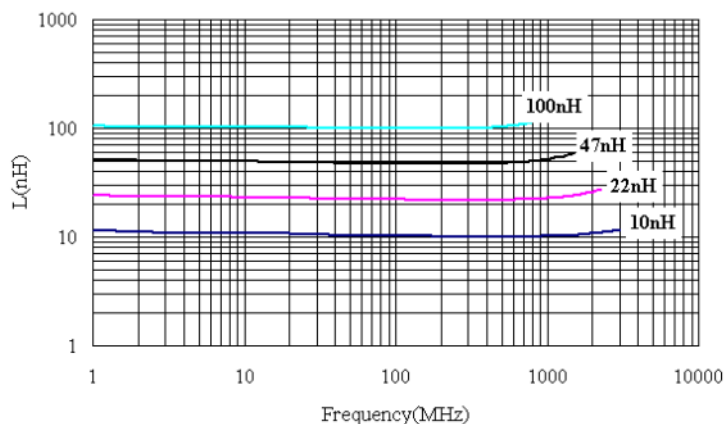
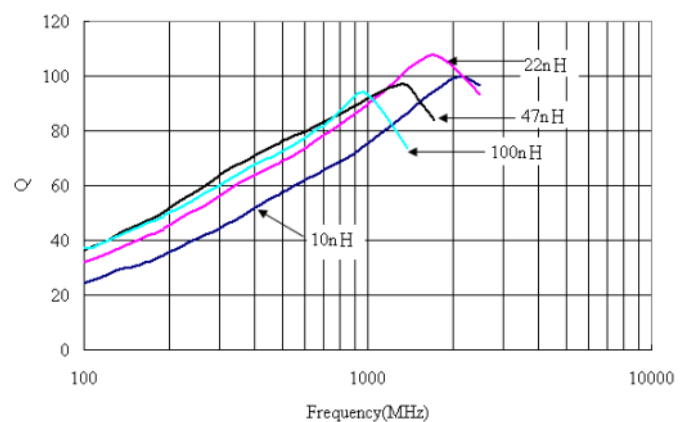
- Specifications are measured using HP E4991A
- Inductance tolerance: Letter at end of part number: G = $\pm 2\%$; J = $\pm 5\%$; K = $\pm 10\%$

DIMENSIONS
SOLDER PATTERN

Unit: mm

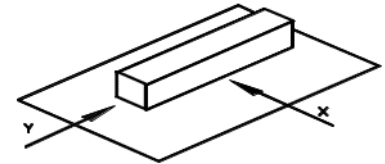


	A	B	C	D	F	G	D1	D2	D3
mm	2.40 Max	1.60 Max	1.40 Max	0.51	0.44	1.45	2.80	0.76	1.78

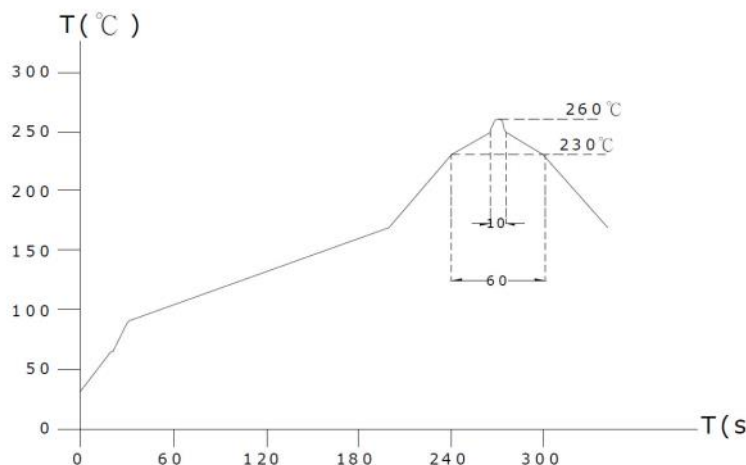
L vs FREQUENCY

Q vs FREQUENCY


RELIABILITY TEST

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
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~+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 $40 \pm 2^{\circ}\text{C}$ 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/s^2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C, 10 seconds (See recommend reflow)
11. Storage environment
Temperature: 10°C~35°C; -35°C~85°C (after mounting on PCB)
Humidity Range: 50% ~ 80% RH
12. Use components within 12 months.
If 12 months or more have elapsed, check solderability before use.



LEAD-FREE HEAT ENDURANCE TEST



LEAD-FREE RECOMMENDED REFLOW

