

CFL1008C TYPE

●FEATURE

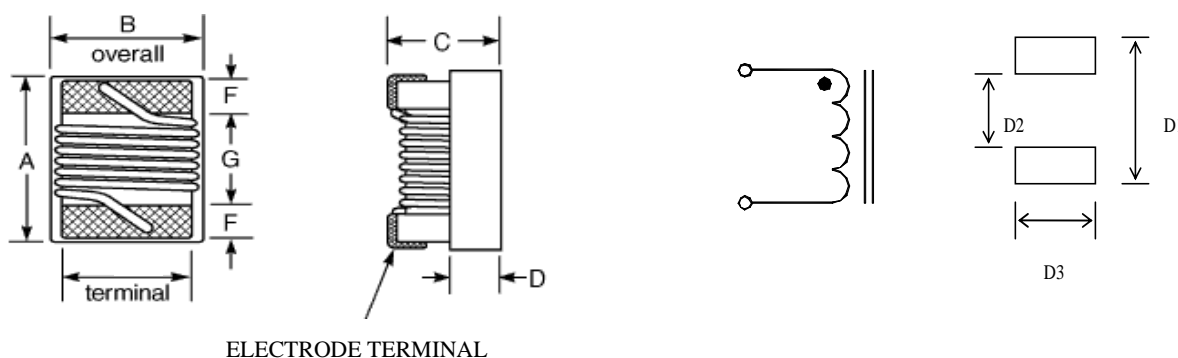
1. High frequency
2. Highest possible SRF as well as excellent Q values

●Applications

1. Pager, Cordless phone and High freq. communication products

●Shape and Dimension

●Schematics and Land Patterns(mm)



●Specification

Dimension in m/m

| TYPE | A(Max) | B(Max) | C(Max) | D | F | G | D1 | D2 | D3 |
|----------|--------|--------|--------|------|------|------|------|------|------|
| CFL1008C | 2.92 | 2.79 | 2.03 | 1.30 | 0.55 | 1.60 | 3.30 | 1.27 | 2.90 |

Note1. Measurement equipment of electrical : HP E4991A

Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. Inductance tolerance: B: $\pm 0.2nH$; S: $\pm 0.3nH$; G: $\pm 2\%$; J: $\pm 5\%$; K: $\pm 5\%$

Note4. Ordering code : Part number + Inductance tolerance + customer code(if necessary)

Note5. Customer code:T1: CFL1008C can use no wire cross over when over 470nH

Note5. This specification might be changed without notice due to under developing and improving.

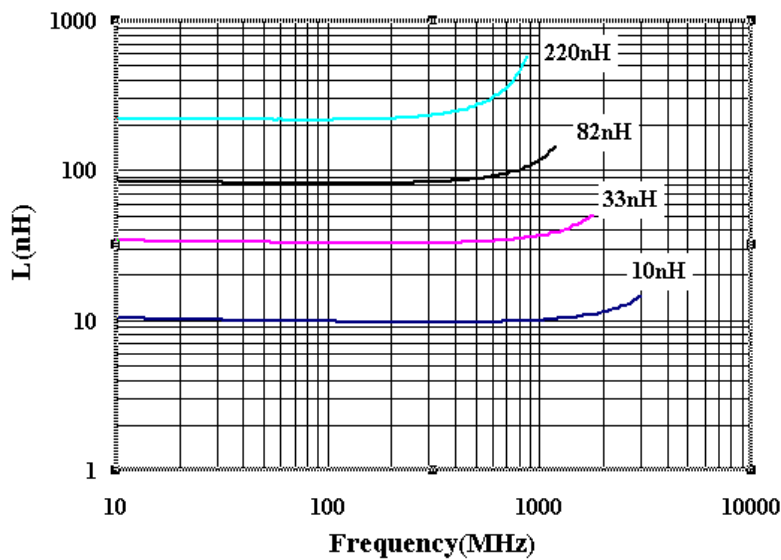
Thank you for your understanding.

| Part Number | L(nH)/@MHz | Inductance tolerance | Q min /@MHz | SRF(MHz) min. | DCR (Ω Max) | IDC(mA) (Max) |
|---------------|------------|----------------------|-------------|---------------|---------------------|---------------|
| CFL1008C-10N□ | 10 / 50 | G , J , K | 50 / 500 | 4100 | 0.08 | 1000 |
| CFL1008C-12N□ | 12 / 50 | G , J , K | 50 / 500 | 3300 | 0.09 | 1000 |
| CFL1008C-15N□ | 15 / 50 | G , J , K | 50 / 500 | 2500 | 0.16 | 1000 |
| CFL1008C-18N□ | 18 / 50 | G , J , K | 50 / 350 | 2500 | 0.11 | 1000 |
| CFL1008C-22N□ | 22 / 50 | G , J , K | 55 / 350 | 2400 | 0.12 | 1000 |
| CFL1008C-27N□ | 27 / 50 | G , J , K | 50 / 350 | 1600 | 0.13 | 1000 |
| CFL1008C-33N□ | 33 / 50 | G , J , K | 60 / 350 | 1600 | 0.14 | 1000 |
| CFL1008C-39N□ | 39 / 50 | G , J , K | 60 / 350 | 1500 | 0.15 | 1000 |
| CFL1008C-47N□ | 47 / 50 | G , J , K | 65 / 350 | 1500 | 0.16 | 1000 |
| CFL1008C-56N□ | 56 / 50 | G , J , K | 65 / 350 | 1300 | 0.18 | 1000 |
| CFL1008C-68N□ | 68 / 50 | G , J , K | 65 / 350 | 1300 | 0.20 | 1000 |
| CFL1008C-82N□ | 82 / 50 | G , J , K | 60 / 350 | 1000 | 0.22 | 1000 |
| CFL1008C-R10□ | 100 / 25 | G , J , K | 60 / 350 | 1000 | 0.56 | 650 |
| CFL1008C-R12□ | 120 / 25 | G , J , K | 60 / 350 | 950 | 0.63 | 650 |
| CFL1008C-R15□ | 150 / 25 | G , J , K | 45 / 100 | 850 | 0.70 | 580 |
| CFL1008C-R18□ | 180 / 25 | G , J , K | 45 / 100 | 750 | 0.77 | 620 |
| CFL1008C-R22□ | 220 / 25 | G , J , K | 45 / 100 | 700 | 0.84 | 500 |
| CFL1008C-R27□ | 270 / 25 | G , J , K | 45 / 100 | 600 | 0.91 | 500 |
| CFL1008C-R33□ | 330 / 25 | G , J , K | 45 / 100 | 570 | 1.05 | 450 |
| CFL1008C-R39□ | 390 / 25 | G , J , K | 45 / 100 | 500 | 1.12 | 470 |
| CFL1008C-R47□ | 470 / 25 | G , J , K | 45 / 100 | 450 | 1.19 | 470 |
| CFL1008C-R56□ | 560 / 25 | G , J , K | 45 / 100 | 415 | 1.33 | 400 |
| CFL1008C-R62□ | 620 / 25 | G , J , K | 45 / 100 | 375 | 1.40 | 300 |
| CFL1008C-R68□ | 680 / 25 | G , J , K | 45 / 100 | 375 | 1.47 | 400 |
| CFL1008C-R75□ | 750 / 25 | G , J , K | 45 / 100 | 360 | 1.54 | 360 |
| CFL1008C-R82□ | 820 / 25 | G , J , K | 45 / 100 | 350 | 1.61 | 400 |
| CFL1008C-R91□ | 910 / 25 | G , J , K | 35 / 50 | 320 | 1.68 | 380 |
| CFL1008C-1R0□ | 1000 / 25 | G , J , K | 35 / 50 | 290 | 1.75 | 370 |
| CFL1008C-1R2□ | 1200 / 7.9 | G , J , K | 30 / 50 | 250 | 2.00 | 310 |
| CFL1008C-1R5□ | 1500 / 7.9 | G , J , K | 28 / 50 | 200 | 2.30 | 330 |
| CFL1008C-1R8□ | 1800 / 7.9 | G , J , K | 28 / 50 | 160 | 2.60 | 300 |
| CFL1008C-2R2□ | 2200 / 7.9 | G , J , K | 28 / 50 | 160 | 2.80 | 280 |
| CFL1008C-2R7□ | 2700 / 7.9 | G , J , K | 22 / 25 | 135 | 3.20 | 290 |
| CFL1008C-3R3□ | 3300 / 7.9 | G , J , K | 22 / 25 | 110 | 3.40 | 290 |
| CFL1008C-3R9□ | 3900 / 7.9 | G , J , K | 20 / 25 | 100 | 3.60 | 260 |

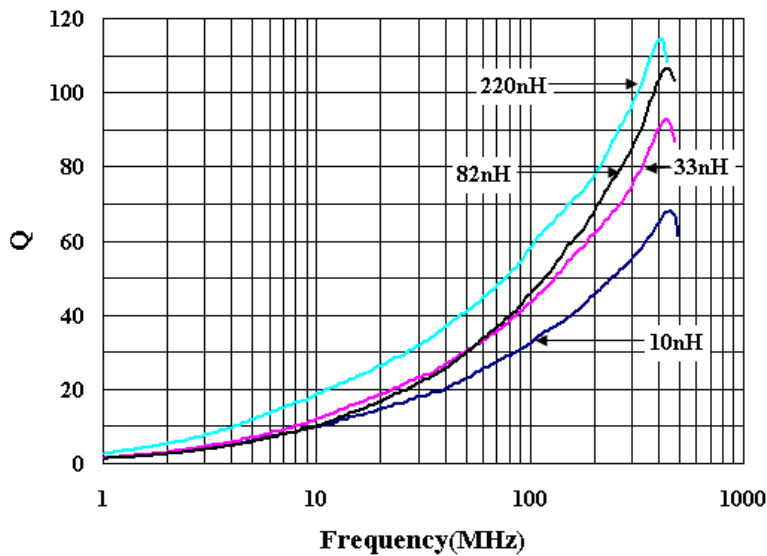
| Part Number | L(nH)/@MHz | Inductance tolerance | Q min /@MHz | SRF(MHz) min. | DCR (Ω Max) | IDC(mA) (Max) |
|---------------|-------------|----------------------|-------------|---------------|---------------------|---------------|
| CFL1008C-4R7□ | 4700 / 7.9 | G , J , K | 20 / 25 | 90 | 4.00 | 260 |
| CFL1008C-5R6□ | 5600 / 7.9 | G , J , K | 18 / 7.9 | 40 | 4.20 | 240 |
| CFL1008C-6R8□ | 6800 / 7.9 | G , J , K | 18 / 7.9 | 40 | 4.90 | 200 |
| CFL1008C-8R2□ | 8200 / 7.9 | G , J , K | 18 / 7.9 | 25 | 6.00 | 170 |
| CFL1008C-100□ | 10000 / 2.5 | G , J , K | 18 / 7.9 | 25 | 8.00 | 150 |

● Electrical curve

L VS FREQUENCY



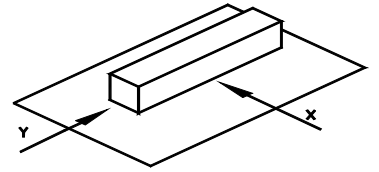
Q VS FREQUENCY



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



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 $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ $(-25\sim +80^{\circ}\text{C})$.
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/s² (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 attached recommend reflow)
11. Storage environment: Storage condition: Temperature Range: 10°C ~ 35°C (Generally: 21°C ~ 31°C) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35°C ~ 85°C , 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

