

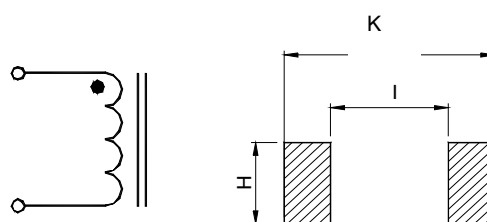
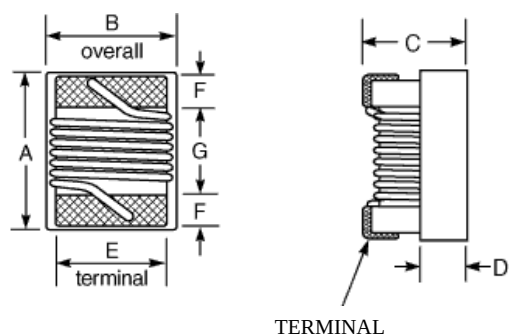
CFL252018CF TYPE

● FEATURE

1. Wire wound SMD inductors, power line used
2. Highly accurate dimensions and reliable

● Applications

1. Hard Disk drives, and other electronic equipment

● Shape and Dimension● Schematics and Land Patterns(mm)● Specification

Dimension in m/m

TYPE	A	B	C	D	E	F	G	K	H	I
CFL252018CF(1008)	2.90Max	2.54Max	2.03Max	1.30	2.00	0.50	1.50	3.31	2.54	1.27

Note1. Measurement frequency of Inductance value : at electrical characteristics

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

Note3. IDC : This indicates the value of current when the inductances is 10% lower than its initial value at D.C. superimposition or D.C. current when at $\Delta t=20^{\circ}\text{C}$, which is lower. ($T_a=20^{\circ}\text{C}$)

Note4. Inductance tolerance: J: $\pm 5\%$;K: $\pm 10\%$; M: $\pm 20\%$

Note5. Ordering Code (P/N)

1. TYPE NAME : CFL252018CF

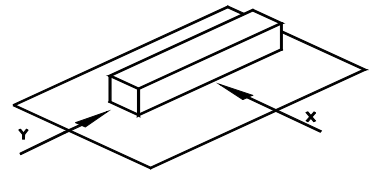
2. INDUCTANCE VALUE : 100(10uH)

3. INDUCTANCE TOLERANCE : ☐ (see Note4)

P/N	L(μH) /MHz	Inductance Tolerance	Q Typ. /MHz	SRF (MHz) Min	RDC (Ω)Max	IDC (mA)Max
CFL252018CF-R47□	0.47 / 25	J , K	35 / 25	460	0.20	1800
CFL252018CF-R82□	0.82 / 25	J , K	35 / 25	360	0.35	1200
CFL252018CF-1R2□	1.2 / 7.9	J , K	32 / 7.9	290	0.25	1100
CFL252018CF-1R5□	1.5 / 7.9	J , K	32 / 7.9	230	0.42	1000
CFL252018CF-1R8□	1.8 / 7.9	J , K	27 / 7.9	180	0.45	800
CFL252018CF-2R2□	2.2 / 7.9	J , K	27 / 7.9	140	0.50	900
CFL252018CF-3R3□	3.3 / 7.9	J , K	27 / 7.9	125	0.60	900
CFL252018CF-3R9□	3.9 / 7.9	J , K	27 / 7.9	100	0.80	800
CFL252018CF-4R7□	4.7 / 7.9	J , K	27 / 7.9	90	0.90	720
CFL252018CF-6R8□	6.8 / 7.9	J , K	27 / 7.9	60	1.05	670
CFL252018CF-8R2□	8.2 / 7.9	J , K	25 / 7.9	55	1.20	640
CFL252018CF-100□	10 / 2.5	J , K	23 / 2.5	55	1.55	540
CFL252018CF-150□	15 / 2.5	J , K	23 / 2.5	36	2.38	460
CFL252018CF-220□	22 / 2.5	J , K	23 / 2.5	29	2.92	400
CFL252018CF-330□	33 / 2.5	J , K	23 / 2.5	21	4.10	300
CFL252018CF-470□	47 / 2.5	J , K	23 / 2.5	17	7.80	220

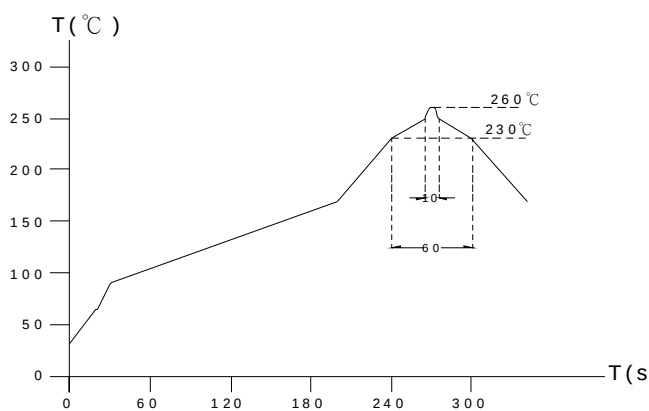
GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO $+105^{\circ}\text{C}$ (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



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 $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ ($-25\sim +80^{\circ}\text{C}$).
7. Humidity characteristics(Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in $90\sim 95\%$ 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 ($10\sim 55\sim 10\text{ Hz}$) 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 attached recommend reflow)
11. Storage environment: Storage condition: Temperature Range: $10^{\circ}\text{C} \sim 35^{\circ}\text{C}$ (Generally: $21^{\circ}\text{C} \sim 31^{\circ}\text{C}$) , Humidity Range: $50\% \sim 80\% \text{ RH}$ (Generally: $65\% \sim 75\%$) ; Transportation condition: Temperature Range: $-35^{\circ}\text{C} \sim 85^{\circ}\text{C}$, Humidity Range: $50\% \sim 95\% \text{ RH}$
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

