

## CFL252018SF TYPE

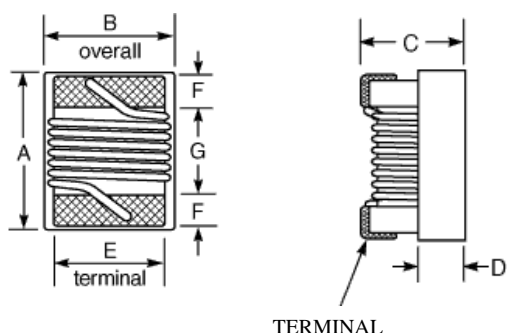
### ●FEATURE

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

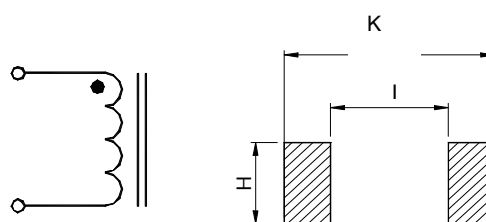
### ●Applications

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
CFL252018SF(1008)	2.90Max	2.54Max	2.05Max	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  $\Delta t=25^\circ\text{C}$ , 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 : CFL252018SF

2. INDUCTANCE VALUE : 100(10uH)

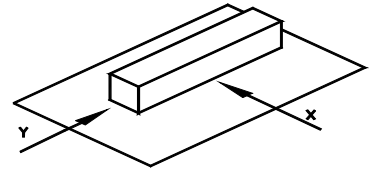
3. INDUCTANCE TOLERANCE :  (see Note4)

P/N	L( $\mu$ H) /MHz	Inductance Tolerance	Q Min /MHz	SRF (MHz) Min	RDC ( $\Omega$ )Max	IDC (mA)Max
CFL252018SF-R22□	0.22 / 25	J , K	30 / 25	930	0.40	880
CFL252018SF-R56□	0.56 / 25	J , K	30 / 25	460	0.55	900
CFL252018SF-R62□	0.62 / 25	J , K	30 / 25	460	0.55	900
CFL252018SF-R68□	0.68 / 25	J , K	30 / 25	420	0.55	880
CFL252018SF-R75□	0.75 / 25	J , K	30 / 25	420	0.65	880
CFL252018SF-R82□	0.82 / 25	J , K	30 / 25	380	0.65	840
CFL252018SF-R91□	0.91 / 25	J , K	30 / 25	400	0.65	840
CFL252018SF-1R0□	1.0 / 7.9	J , K	25 / 7.9	300	0.60	800
CFL252018SF-1R2□	1.2 / 7.9	J , K	25 / 7.9	280	0.74	800
CFL252018SF-1R5□	1.5 / 7.9	J , K	25 / 7.9	245	0.85	780
CFL252018SF-1R8□	1.8 / 7.9	J , K	25 / 7.9	240	0.92	780
CFL252018SF-2R2□	2.2 / 7.9	J , K	25 / 7.9	205	1.10	760
CFL252018SF-2R7□	2.7 / 7.9	J , K	25 / 7.9	187	1.22	760
CFL252018SF-3R3□	3.3 / 7.9	J , K	25 / 7.9	165	1.37	740
CFL252018SF-3R9□	3.9 / 7.9	J , K	25 / 7.9	144	1.66	700
CFL252018SF-4R7□	4.7 / 7.9	J , K	25 / 7.9	110	1.68	660
CFL252018SF-5R6□	5.6 / 7.9	J , K	25 / 7.9	88	1.75	640
CFL252018SF-6R8□	6.8 / 7.9	J , K	25 / 7.9	70	1.85	640
CFL252018SF-8R2□	8.2 / 7.9	J , K	25 / 7.9	57	2.00	600
CFL252018SF-100□	10 / 2.5	J , K	20 / 7.9	55	2.32	600
CFL252018SF-120□	12 / 2.5	J , K	15 / 2.5	52	2.99	560
CFL252018SF-150□	15 / 2.5	J , K	15 / 2.5	49	3.42	480
CFL252018SF-180□	18 / 2.5	J , K	15 / 2.5	48	4.65	420
CFL252018SF-220□	22 / 2.5	J , K	15 / 2.5	25	5.12	420
CFL252018SF-270□	27 / 2.5	J , K	15 / 2.5	23	5.76	420
CFL252018SF-330□	33 / 2.5	J , K	15 / 2.5	17	6.44	400
CFL252018SF-390□	39 / 2.5	J , K	15 / 2.5	15	6.85	380
CFL252018SF-470□	47 / 2.5	J , K	14 / 2.5	13	9.94	260
CFL252018SF-560□	56 / 2.5	J , K	14 / 2.5	10	10.7	280
CFL252018SF-680□	68 / 2.5	J , K	14 / 2.5	8	12.8	260
CFL252018SF-820□	82 / 2.5	J , K	14 / 2.5	8	18.3	240
CFL252018SF-101□	100 / 1	J , K	8 / 1	7	19.6	200

## GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 105°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  $(10\sim 55\sim 10\text{ Hz})$  with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within  $\pm 5\%$ , after being dropped once with 981m/s<sup>2</sup> (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

