

CFL161010CF TYPE

●FEATURE

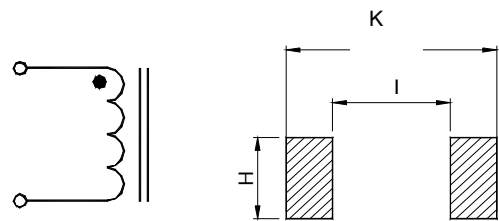
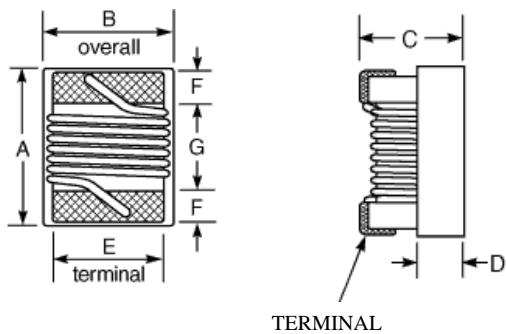
1. Wire wound SMD inductors, for power line used.
2. Highly accurate dimensions and reliable

●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
CFL161010CF(0603)	1.80Max	1.20Max	1.20Max	0.45	0.80	0.35	0.80	1.92	1.10	0.64

Note1. Measurement frequency of Inductance value : at electrical characteristics

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

Note3. Isat: DC current at which the inductance drops 35%(typ) from its value without current

Note4. Irms: Average current for 40°C temperature rise from 25°C ambient(typical)

Note5. Inductance tolerance: J: ±5% ;K: ±10% ; M: ±20%

Note6. Ordering Code (P/N)

1.TYPE NAME : CFL161010CF

2.INDUCTANCE VALUE : 100(10uH)

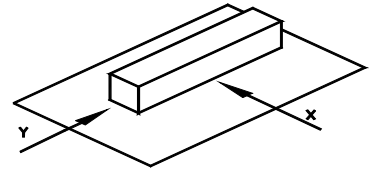
3.INDUCTANCE TOLERANCE : (see Note4)

P/N	L (μ H)	TEST FREQ. (MHz)	Q Min	SRF (MHz) Min	RDC (Ω)Max	Isat (mA)Max	Irms (mA)Max
CFL161010CF-47N□	0.047	7.9	10	2000	0.075	1800	1600
CFL161010CF-R10□	0.10	7.9	12	1150	0.13	2200	1300
CFL161010CF-R15□	0.15	7.9	15	1050	0.15	1800	1100
CFL161010CF-R22□	0.22	7.9	15	900	0.30	1300	990
CFL161010CF-R24□	0.24	7.9	15	850	0.16	1700	1100
CFL161010CF-R27□	0.27	7.9	15	835	0.30	1400	1000
CFL161010CF-R33□	0.33	7.9	15	725	0.40	1300	1000
CFL161010CF-R39□	0.39	7.9	15	680	0.41	1200	990
CFL161010CF-R47□	0.47	7.9	15	640	0.43	1200	860
CFL161010CF-R56□	0.56	7.9	15	630	0.44	1200	860
CFL161010CF-R68□	0.68	7.9	15	510	0.52	1000	780
CFL161010CF-R78□	0.78	7.9	15	465	0.63	990	780
CFL161010CF-R82□	0.82	7.9	15	460	0.69	990	760
CFL161010CF-1R0□	1.0	7.9	15	320	0.81	850	700
CFL161010CF-1R2□	1.2	7.9	15	270	0.87	850	590
CFL161010CF-1R5□	1.5	7.9	15	230	0.96	830	570
CFL161010CF-1R8□	1.8	7.9	15	210	1.10	820	540
CFL161010CF-2R2□	2.2	7.9	15	115	1.20	720	540
CFL161010CF-2R7□	2.7	7.9	15	100	1.38	700	460
CFL161010CF-3R3□	3.3	7.9	15	84	1.50	640	480
CFL161010CF-3R9□	3.9	7.9	15	75	1.50	630	480
CFL161010CF-4R7□	4.7	7.9	15	67	2.10	530	380
CFL161010CF-5R6□	5.6	7.9	15	55	2.37	510	360
CFL161010CF-6R8□	6.8	7.9	15	48	3.10	490	350
CFL161010CF-7R8□	7.8	7.9	15	40	3.35	420	320
CFL161010CF-8R2□	8.2	7.9	15	38	3.50	450	320
CFL161010CF-100□	10	7.9	15	32	4.46	370	280
CFL161010CF-150□	15	7.9	15	25	9.50	240	170

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~+80°C degree Celsius), 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/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 condition: Temperature Range: 0°C ~ 35°C ; -40°C ~ 105°C (after PCB) · Humidity Range: 50% ~ 70% 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

