

● FEATURE

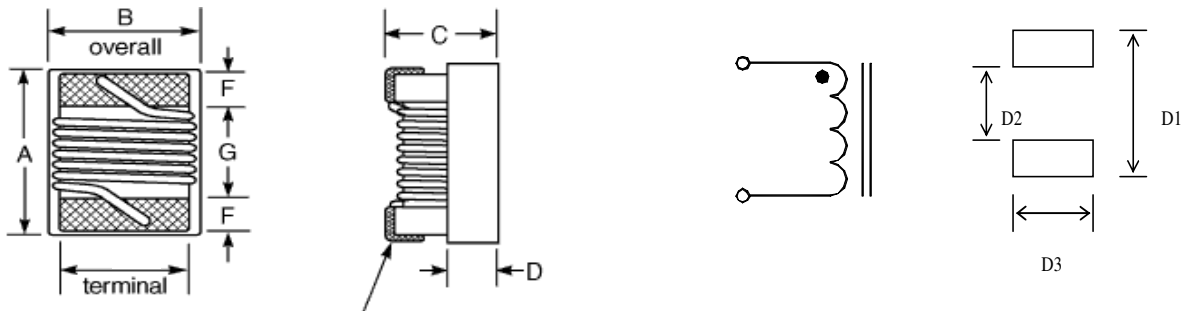
1. High frequency
2. Highest possible SRF as well as excellent Q values

● Applications

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

● Shape and Dimension

● Schematics and Land Patterns(mm)



ELECTRODE TERMINAL

● Specification

Dimension in m/m

TYPE	A(Max)	B(Max)	C(Max)	D	F	G	D1	D2	D3
ECFL0603C	1.80	1.20	1.20	0.38	0.35	1.00	1.92	0.64	1.26

Note1. Measurement equipment of electrical : HP E4991A

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

Note3. Inductance tolerance: G: ±2% ; J: ±5% ; K: ±10%

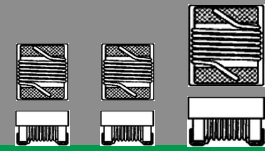
Note4. Ordering code : Part number + Inductance tolerance + customer code(if necessary)

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

Thank you for your understanding.

CERAMIC CHIP INDUCTOR

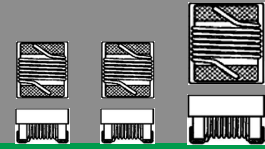
– ECFL0603C SERIES



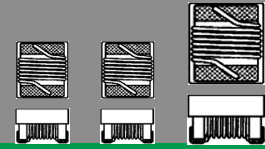
Part Number	L(nH)/@MHz	Inductance tolerance	Q min / @MHz	SRF(MHz) min.	DCR (Ω Max)	IDC(mA) (Max)
ECFL0603C-1N6□	1.6 / 250	J , K	24 / 250	12500	0.030	700
ECFL0603C-1N8□	1.8 / 250	J , K	16 / 250	12500	0.045	700
ECFL0603C-2N2□	2.2 / 250	J , K	13 / 250	12500	0.250	700
ECFL0603C-3N3□	3.3 / 250	J , K	30 / 250	5900	0.045	700
ECFL0603C-3N6□	3.6 / 250	J , K	22 / 250	5900	0.063	700
ECFL0603C-3N9□	3.9 / 250	J , K	22 / 250	6900	0.080	700
ECFL0603C-4N3□	4.3 / 250	J , K	22 / 250	5900	0.063	700
ECFL0603C-4N7□	4.7 / 250	J , K	20 / 250	5800	0.085	700
ECFL0603C-5N1□	5.1 / 250	J , K	20 / 250	5700	0.115	700
ECFL0603C-5N6□	5.6 / 250	J , K	20 / 250	5800	0.160	700
ECFL0603C-6N3□	6.3 / 250	J , K	26 / 250	5700	0.115	700
ECFL0603C-6N8□	6.8 / 250	J , K	27 / 250	5800	0.125	700
ECFL0603C-7N5□	7.5 / 250	J , K	28 / 250	4800	0.115	700
ECFL0603C-8N2□	8.2 / 250	J , K	30 / 250	4700	0.125	700
ECFL0603C-8N7□	8.7 / 250	J , K	28 / 250	4600	0.109	700
ECFL0603C-9N1□	9.1 / 250	J , K	28 / 250	4600	0.120	700
ECFL0603C-9N5□	9.5 / 250	G , J , K	28 / 250	5400	0.145	700
ECFL0603C-10N□	10 / 250	G , J , K	31 / 250	4800	0.145	700
ECFL0603C-11N□	11 / 250	G , J , K	30 / 250	4000	0.145	700
ECFL0603C-12N□	12 / 250	G , J , K	35 / 250	4000	0.145	700
ECFL0603C-15N□	15 / 250	G , J , K	35 / 250	4000	0.180	700
ECFL0603C-16N□	16 / 250	G , J , K	34 / 250	3300	0.170	700
ECFL0603C-18N□	18 / 250	G , J , K	35 / 250	3100	0.180	700
ECFL0603C-19N□	19 / 250	G , J , K	35 / 250	3000	0.190	700
ECFL0603C-20N□	20 / 250	G , J , K	38 / 250	3000	0.180	700
ECFL0603C-22N□	22 / 250	G , J , K	38 / 250	3000	0.205	700
ECFL0603C-23N□	23 / 250	G , J , K	38 / 250	2850	0.205	700
ECFL0603C-24N□	24 / 250	G , J , K	36 / 250	2650	0.205	700
ECFL0603C-25N□	25 / 250	G , J , K	38 / 250	2800	0.210	600
ECFL0603C-27N□	27 / 250	G , J , K	40 / 250	2800	0.220	600
ECFL0603C-30N□	30 / 250	G , J , K	37 / 250	2250	0.220	600
ECFL0603C-33N□	33 / 250	G , J , K	40 / 250	2300	0.240	600
ECFL0603C-36N□	36 / 250	G , J , K	37 / 250	2080	0.250	600
ECFL0603C-39N□	39 / 250	G , J , K	40 / 250	2200	0.260	600
ECFL0603C-43N□	43 / 250	G , J , K	38 / 250	2000	0.280	600

CERAMIC CHIP INDUCTOR

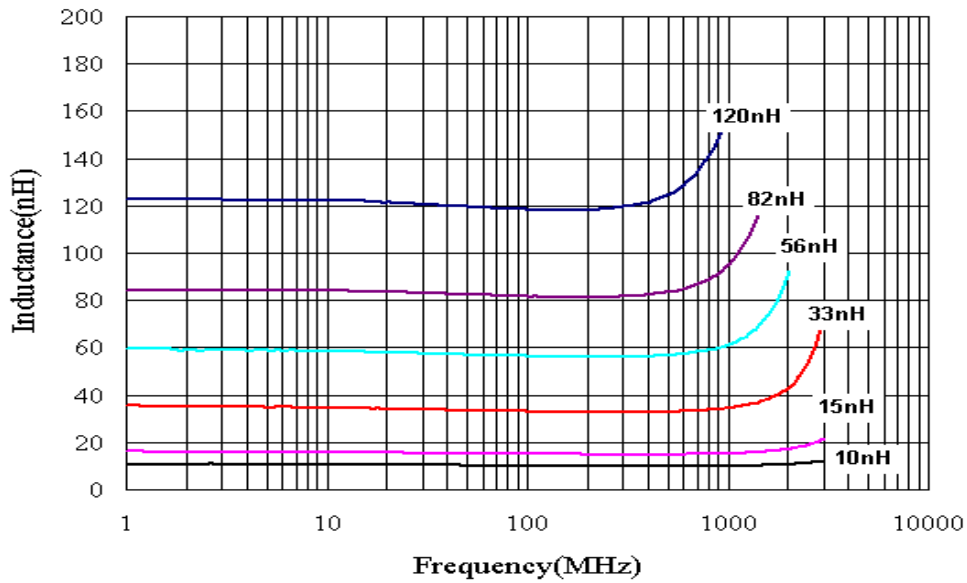
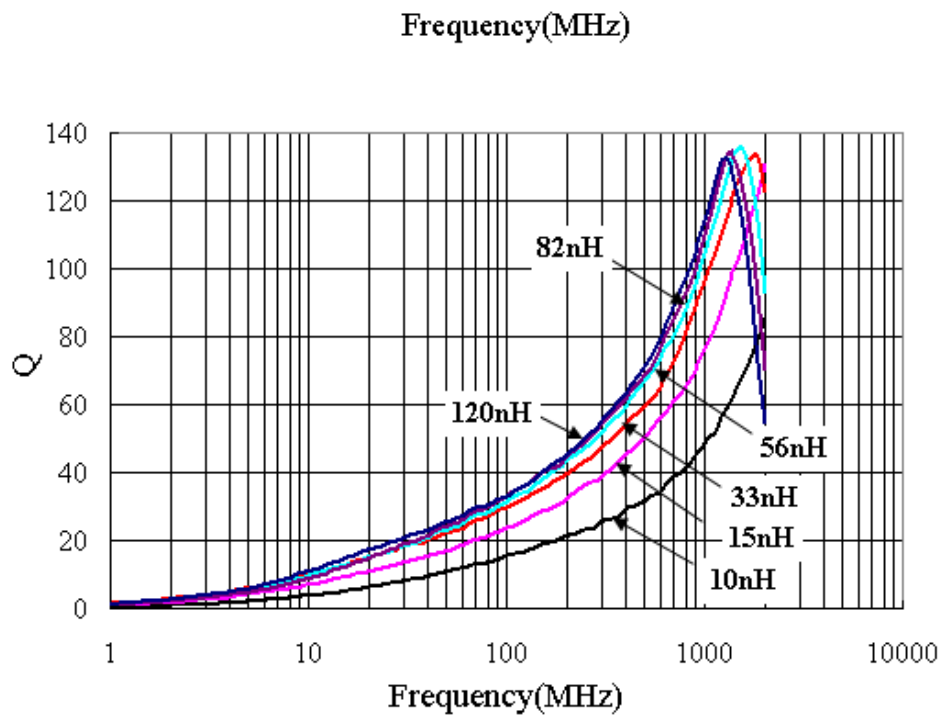
– ECFL0603C SERIES

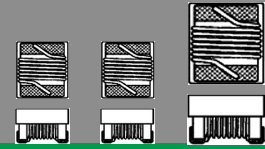


Part Number	L(nH)/@MHz	Inductance tolerance	Q min / @MHz	SRF(MHz) min.	DCR (Ω Max)	IDC(mA) (Max)
ECFL0603C-47N□	47 / 200	G , J , K	38 / 200	2000	0.280	600
ECFL0603C-56N□	56 / 200	G , J , K	38 / 200	1900	0.310	600
ECFL0603C-62N□	62 / 200	G , J , K	37 / 200	1800	0.330	600
ECFL0603C-68N□	68 / 200	G , J , K	37 / 200	1700	0.340	600
ECFL0603C-72N□	72 / 150	G , J , K	34 / 150	1700	0.490	400
ECFL0603C-82N□	82 / 150	G , J , K	34 / 150	1700	0.540	400
ECFL0603C-91N□	91 / 150	G , J , K	34 / 150	1500	0.560	400
ECFL0603C-R10□	100 / 150	G , J , K	34 / 150	1400	0.580	400
ECFL0603C-R11□	110 / 150	G , J , K	32 / 150	1350	0.610	300
ECFL0603C-R12□	120 / 150	G , J , K	32 / 150	1300	0.750	300
ECFL0603C-R15□	150 / 150	G , J , K	28 / 150	990	0.920	280
ECFL0603C-R17□	170 / 100	G , J , K	25 / 100	990	1.150	240
ECFL0603C-R18□	180 / 100	G , J , K	25 / 100	990	1.250	240
ECFL0603C-R19□	190 / 100	G , J , K	25 / 100	990	1.350	200
ECFL0603C-R20□	200 / 100	G , J , K	25 / 100	990	1.500	200
ECFL0603C-R22□	220 / 100	G , J , K	25 / 100	900	1.600	250
ECFL0603C-R27□	270 / 100	G , J , K	24 / 100	900	2.000	170
ECFL0603C-R33□	330 / 100	G , J , K	25 / 100	900	2.750	100
ECFL0603C-R34□	340 / 100	G , J , K	25 / 100	900	2.900	100
ECFL0603C-R39□	390 / 100	G , J , K	25 / 100	900	3.150	100
ECFL0603C-R47□	470 / 100	G , J , K	25 / 100	750	4.000	80



● Electrical curve

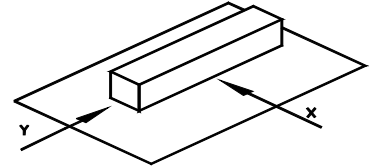
L VS FREQUENCY**Q VS FREQUENCY**



GENERAL CHARACTERISTICS

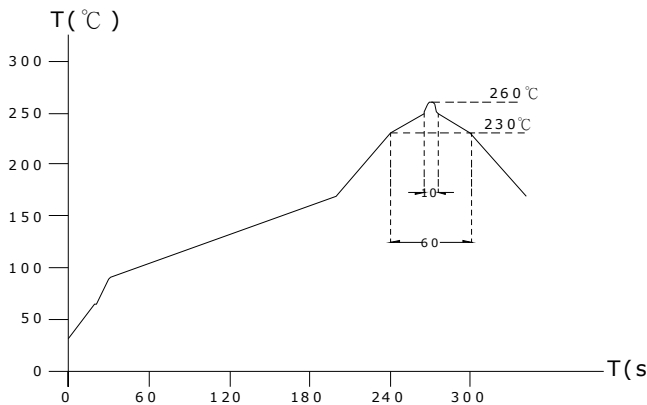
1. Operating temperature range: -40 TO $+125^{\circ}\text{C}$ (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y 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 $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ ($-25\sim +80^{\circ}\text{C}$ 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 $90\sim 95\%$ 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 ($10\sim 55\sim 10$ 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 condition: Temperature Range: $0^{\circ}\text{C} \sim 35^{\circ}\text{C}$; $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$ (after PCB) , Humidity Range: $50\% \sim 70\% \text{ RH}$
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

