

● FEATURE

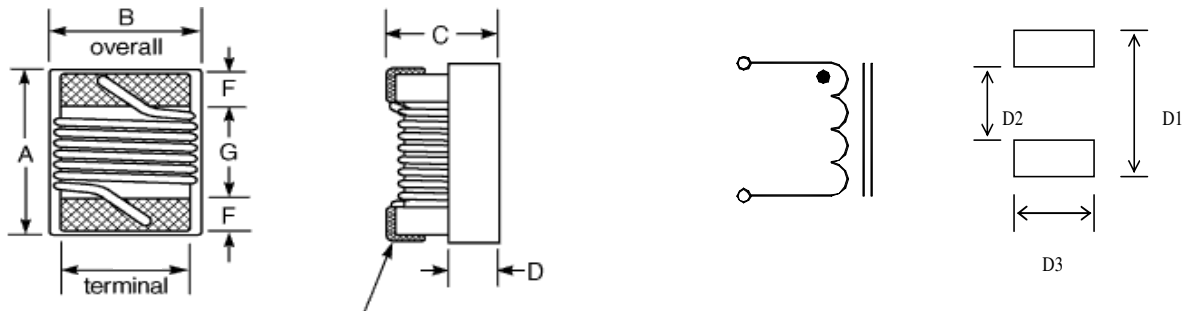
1. High frequency
2. Highest possible SRF as well as excellent Q values

● 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
ECFL0402C	1.19	0.65	0.66	0.20	0.20	0.64	1.20	0.46	0.68

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: $\pm 10\%$

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

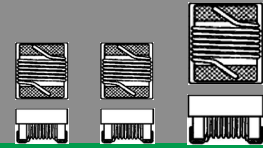
Note5. Unit weight: 0.0008g (for ref.) ; without marking on the top of product.

Note6. This specification might be changed without notice due to under developing and improving.

Thank you for your understanding.

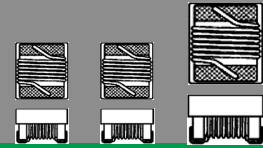
CERAMIC CHIP INDUCTOR

– ECFL0402C SERIES



Part Number	L(nH)/@MHz	Inductance tolerance	Q min @250MHz	SRF(MHz) min.	DCR (Ω Max)	IDC(mA) (Max)
ECFL0402C-1N0□	1.0 / 250	J , K	13	6000	0.045	1360
ECFL0402C-1N8□	1.8 / 250	J , K	16	6000	0.070	1040
ECFL0402C-1N9□	1.9 / 250	J , K	16	6000	0.070	1040
ECFL0402C-2N0□	2.0 / 250	J , K	16	6000	0.070	1040
ECFL0402C-2N2□	2.2 / 250	J , K	19	6000	0.070	960
ECFL0402C-2N4□	2.4 / 250	J , K	15	6000	0.068	790
ECFL0402C-2N7□	2.7 / 250	J , K	16	6000	0.120	640
ECFL0402C-3N3□	3.3 / 250	J , K	19	6000	0.066	840
ECFL0402C-3N6□	3.6 / 250	J , K	19	6000	0.066	840
ECFL0402C-3N9□	3.9 / 250	J , K	19	6000	0.066	840
ECFL0402C-4N3□	4.3 / 250	J , K	18	6000	0.091	700
ECFL0402C-4N7□	4.7 / 250	J , K	15	4700	0.130	640
ECFL0402C-5N1□	5.1 / 250	J , K	20	4800	0.083	800
ECFL0402C-5N6□	5.6 / 250	J , K	20	4800	0.083	760
ECFL0402C-6N2□	6.2 / 250	J , K	20	4800	0.083	760
ECFL0402C-6N8□	6.8 / 250	G , J , K	20	4800	0.083	680
ECFL0402C-7N5□	7.5 / 250	G , J , K	22	4800	0.100	680
ECFL0402C-8N2□	8.2 / 250	G , J , K	22	4400	0.100	680
ECFL0402C-8N7□	8.7 / 250	G , J , K	18	4100	0.200	480
ECFL0402C-9N1□	9.1 / 250	G , J , K	22	4160	0.100	680
ECFL0402C-9N5□	9.5 / 250	G , J , K	18	4000	0.200	480
ECFL0402C-10N□	10 / 250	G , J , K	21	3900	0.200	480
ECFL0402C-11N□	11 / 250	G , J , K	24	3680	0.120	640
ECFL0402C-12N□	12 / 250	G , J , K	24	3600	0.120	640
ECFL0402C-13N□	13 / 250	G , J , K	24	3450	0.210	440
ECFL0402C-15N□	15 / 250	G , J , K	24	3280	0.170	560
ECFL0402C-16N□	16 / 250	G , J , K	24	3100	0.220	560
ECFL0402C-18N□	18 / 250	G , J , K	25	3100	0.230	420
ECFL0402C-19N□	19 / 250	G , J , K	24	3040	0.200	480
ECFL0402C-20N□	20 / 250	G , J , K	25	3000	0.250	420
ECFL0402C-22N□	22 / 250	G , J , K	25	2800	0.300	400
ECFL0402C-23N□	23 / 250	G , J , K	22	2720	0.300	400
ECFL0402C-24N□	24 / 250	G , J , K	25	2700	0.300	400
ECFL0402C-27N□	27 / 250	G , J , K	24	2480	0.300	400
ECFL0402C-30N□	30 / 250	G , J , K	25	2350	0.300	400

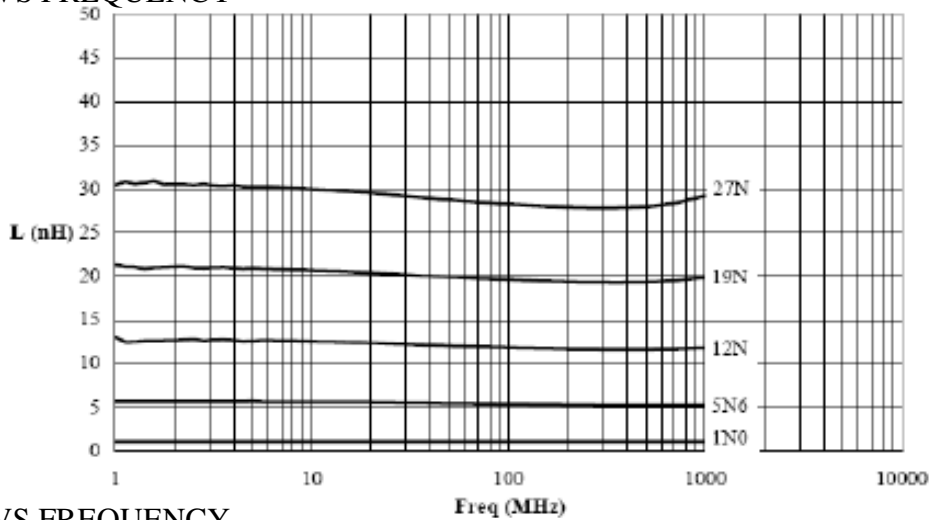
CERAMIC CHIP INDUCTOR
– ECFL0402C SERIES



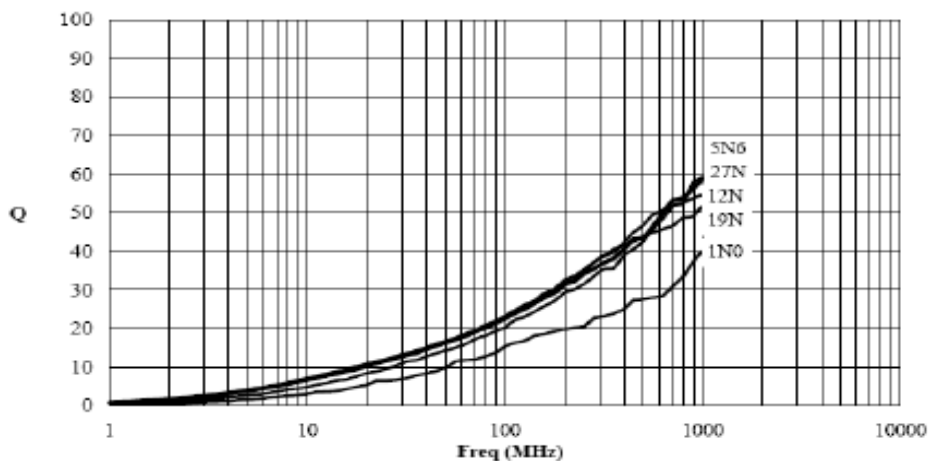
Part Number	L(nH)/@MHz	Inductance tolerance	Q min @250MHz	SRF(MHz) min.	DCR (Ω Max)	IDC(mA) (Max)
ECFL0402C-33N□	33 / 250	G · J · K	24	2350	0.440	400
ECFL0402C-36N□	36 / 250	G · J · K	24	2350	0.440	320
ECFL0402C-39N□	39 / 250	G · J · K	25	2100	0.550	200
ECFL0402C-40N□	40 / 250	G · J · K	24	2240	0.440	320
ECFL0402C-43N□	43 / 250	G · J · K	25	2030	0.810	100
ECFL0402C-47N□	47 / 200	G · J · K	20	2100	0.830	150
ECFL0402C-51N□	51 / 200	G · J · K	25	1750	0.820	100
ECFL0402C-56N□	56 / 200	G · J · K	22	1760	0.970	100
ECFL0402C-68N□	68 / 200	G · J · K	22	1620	1.120	100
ECFL0402C-82N□	82 / 150	J · K	20	1260	1.550	50
ECFL0402C-R10□	100 / 150	G · J · K	20	1160	2.000	30
ECFL0402C-R12□	120 / 150	G · J · K	20	1900	2.200	50

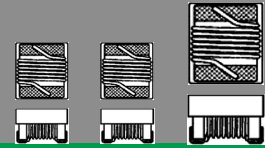
● Electrical curve

L VS FREQUENCY



Q VS FREQUENCY

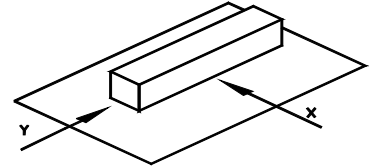




GENERAL CHARACTERISTICS

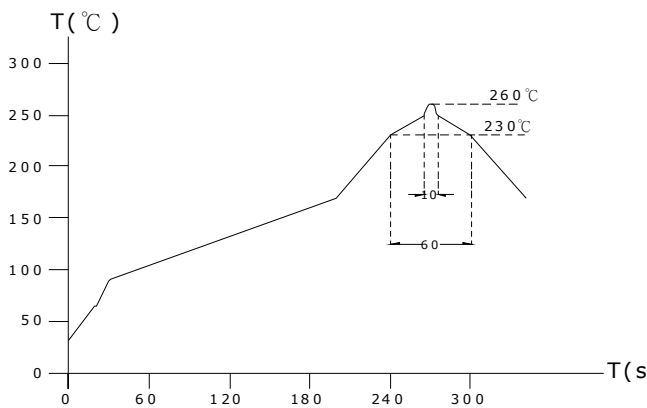
1. Operating temperature range: -40 TO + 105°C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at 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

