



● **FEATURE**

1. Especially high Q factor in this series
2. Low DCR design is ideal for low loss
3. High output and low power consumption



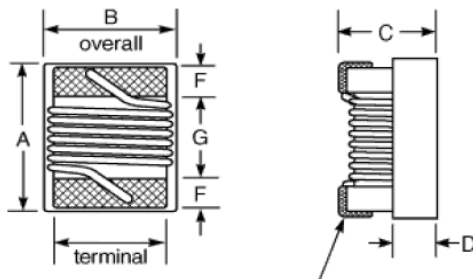
● **APPLICATION**

1. Pager, Cordless phone, PDA
2. High freq. communication products

● **ORDERING INFORMATION**

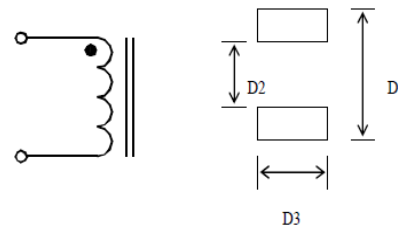
<u>WCL0805</u>	<u>-2N5</u>	<u>I</u>
PN	Inductance	G :±2%
		J :±5%
		K :±10%

● **SHAPE AND DIMENSION**



ELECTRODE TERMINAL

● **SCHEMATICS AND LAND PATTERNS(mm)**



● **SPECIFICATION**

Dimension in m/m

TYPE	A(Max)	B(Max)	C(Max)	D	F	G	D1	D2	D3
WCL0805	2.40	1.65	1.45	0.65	0.44	1.45	2.80	0.76	1.78
WCL1008	2.92	2.54	2.03	1.30	0.55	1.60	3.30	1.27	2.90

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

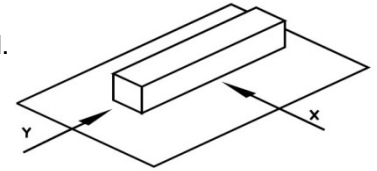


● ELECTRICAL CHARACTERISTICS

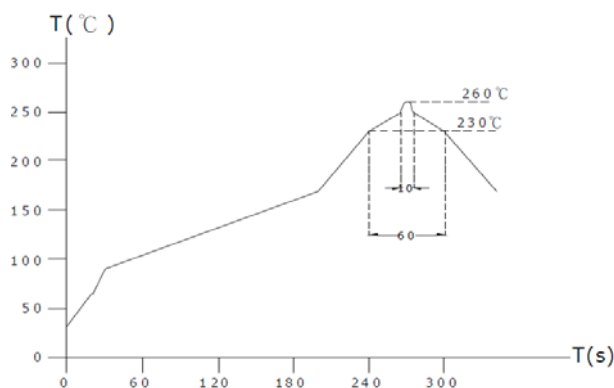
PART NUMBER	L(nH)/@MHz	Inductance tolerance	Q min @MHz	SRF(MHz) min.	DCR (Ω) Max	IDC(mA) (Max)
WCL0805-2N5T	2.5 / 250	J , K	80 / 1500	6000	0.020	1600
WCL0805-5N6T	5.6 / 250	J , K	98 / 1500	6000	0.035	1600
WCL0805-6N2T	6.2 / 250	J , K	88 / 1500	4750	0.035	1600
WCL0805-12NT	12 / 250	G , J , K	80 / 1000	3000	0.045	1600
WCL0805-16NT	16 / 250	G , J , K	72 / 500	2950	0.060	1500
WCL0805-18NT	18 / 250	G , J , K	75 / 500	2550	0.060	1400
WCL0805-20NT	20 / 250	G , J , K	70 / 500	2050	0.065	1400
WCL0805-27NT	27 / 250	G , J , K	75 / 500	2000	0.070	1300
WCL0805-30NT	30 / 250	G , J , K	65 / 500	1950	0.095	1200
WCL0805-39NT	39 / 250	G , J , K	65 / 500	1600	0.100	1100
WCL0805-48NT	48 / 200	G , J , K	65 / 500	1400	0.100	1100
WCL0805-51NT	51 / 200	G , J , K	65 / 500	1400	0.120	1000
WCL1008-4N1T	4.1 / 150	J , K	75 / 1500	6000	0.05	1600
WCL1008-10NT	10 / 50	J , K	60 / 500	3600	0.06	1600
WCL1008-12NT	12 / 50	J , K	60 / 500	2800	0.06	1500
WCL1008-18NT	18 / 50	G , J , K	62 / 350	2700	0.07	1400
WCL1008-22NT	22 / 50	G , J , K	62 / 350	2050	0.07	1400
WCL1008-33NT	33 / 50	G , J , K	75 / 350	1700	0.09	1300
WCL1008-39NT	39 / 50	G , J , K	75 / 350	1300	0.09	1300
WCL1008-47NT	47 / 50	G , J , K	75 / 350	1450	0.12	1200
WCL1008-56NT	56 / 50	G , J , K	75 / 350	1200	0.12	1200
WCL1008-68NT	68 / 50	G , J , K	80 / 350	1150	0.13	1100
WCL1008-82NT	82 / 50	G , J , K	80 / 350	1060	0.16	1100
WCL1008-R10T	100 / 50	G , J , K	62 / 350	1000	0.18	1000
WCL1008-R12T	120 / 25	G , J , K	50 / 100	870	0.18	1000
WCL1008-R15T	150 / 25	G , J , K	50 / 100	850	0.23	1000
WCL1008-R22T	220 / 25	G , J , K	50 / 100	750	0.35	1000
WCL1008-R27T	270 / 25	G , J , K	48 / 100	630	0.40	900
WCL1008-R33T	330 / 25	G , J , K	48 / 100	570	0.47	900
WCL1008-R39T	390 / 25	G , J , K	48 / 100	500	0.62	900

●GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 85°C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil.
Push in two directions of X.Y with 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 (0~2,000)x10-6/°C (-25~+80°C).
7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2°C and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within ±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 ±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.
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 6 months. If 6 months or more have elapsed, check solderability before use.
13. Reflow profile recommend:



Lead - free heat endurance test



Lead-free the recommended reflow condition

