



● **FEATURE**

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



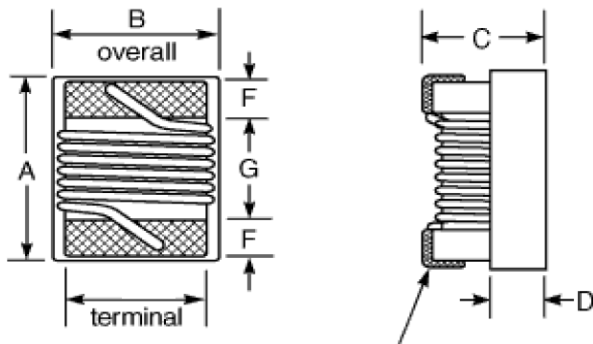
● **APPLICATION**

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

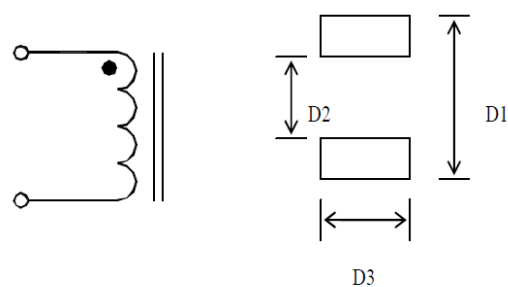
● **ORDERING INFORMATION**

<u>WCM0402</u>	<u>-1N0</u>	<u>T</u>
PN	Inductance	B : ±0.2nH
		S : ±0.3nH
		G : ±2%
		J : ±5%
		K : ±10%

● **SHAPE AND DIMENSION**



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



● **SPECIFICATION**

Dimension in m/m

TYPE	A(Max)	B(Max)	C(Max)	D	F	G	D1	D2	D3
WCM0402	1.19	0.64	0.66	0.25	0.23	0.64	1.20	0.46	0.68
WCM0603	1.80	1.20	1.20	0.38	0.35	1.00	1.92	0.64	1.26
WCM0805	2.40	1.60	1.40	0.51	0.44	1.45	2.80	0.76	1.78
WCM1008	2.92	2.79	2.03	0.65	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: B: ±0.2nH ; S: ±0.3nH ; 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 @250MHz	SRF (MHz) min.	DCR (Ω Max)	IDC(mA) (Max)
WCM0402-1N0T	1.0 / 250	B , S	13	6000	0.045	1360
WCM0402-1N8T	1.8 / 250	B , S	16	6000	0.070	1040
WCM0402-1N9T	1.9 / 250	B , S	16	6000	0.070	1040
WCM0402-2N0T	2.0 / 250	B , S	16	6000	0.070	1040
WCM0402-2N2T	2.2 / 250	B , S	18	6000	0.070	960
WCM0402-2N4T	2.4 / 250	B , S	16	6000	0.068	790
WCM0402-2N7T	2.7 / 250	B , S	18	6000	0.120	640
WCM0402-3N3T	3.3 / 250	B , J , K	20	6000	0.066	840
WCM0402-3N6T	3.6 / 250	B , J , K	20	6000	0.066	840
WCM0402-3N9T	3.9 / 250	B , J , K	20	5800	0.066	840
WCM0402-4N3T	4.3 / 250	B , J , K	18	6000	0.091	700
WCM0402-4N7T	4.7 / 250	B , J , K	15	4775	0.130	640
WCM0402-5N1T	5.1 / 250	B , J , K	23	5800	0.083	800
WCM0402-5N6T	5.6 / 250	B , J , K	23	5800	0.083	760
WCM0402-6N2T	6.2 / 250	B , J , K	23	5800	0.083	760
WCM0402-6N8T	6.8 / 250	B , J , K	20	4800	0.083	680
WCM0402-7N5T	7.5 / 250	B , J , K	25	5800	0.104	680
WCM0402-8N2T	8.2 / 250	B , J , K	25	4400	0.104	680
WCM0402-8N7T	8.7 / 250	B , J , K	18	4100	0.200	480
WCM0402-9N0T	9.0 / 250	B , J , K	25	4160	0.104	680
WCM0402-9N5T	9.5 / 250	B , J , K	18	4000	0.200	680
WCM0402-10NT	10 / 250	G , J , K	23	3900	0.195	480
WCM0402-11NT	11 / 250	G , J , K	26	3680	0.120	640
WCM0402-12NT	12 / 250	G , J , K	26	3600	0.120	640
WCM0402-13NT	13 / 250	G , J , K	24	3450	0.210	560
WCM0402-15NT	15 / 250	G , J , K	26	3280	0.172	560
WCM0402-16NT	16 / 250	G , J , K	24	3100	0.220	560
WCM0402-18NT	18 / 250	G , J , K	25	3100	0.230	420
WCM0402-19NT	19 / 250	G , J , K	26	3040	0.202	480
WCM0402-20NT	20 / 250	G , J , K	25	3000	0.250	420
WCM0402-22NT	22 / 250	G , J , K	25	2800	0.300	400
WCM0402-23NT	23 / 250	G , J , K	26	2720	0.214	400
WCM0402-24NT	24 / 250	G , J , K	25	2700	0.300	400
WCM0402-27NT	27 / 250	G , J , K	26	2480	0.298	400
WCM0402-30NT	30 / 250	G , J , K	25	2350	0.300	400



PART NUMBER	L(nH)/@MHz	Inductance tolerance	Q min @250MHz	SRF (MHz) min.	DCR (ΩMax)	IDC(mA) (Max)
WCM0402-33NT	33 / 250	G , J , K	24	2350	0.350	400
WCM0402-36NT	36 / 250	G , J , K	26	2500	0.403	320
WCM0402-39NT	39 / 250	G , J , K	25	2100	0.550	320
WCM0402-40NT	40 / 250	G , J , K	26	2240	0.438	320
WCM0402-43NT	43 / 250	G , J , K	25	2030	0.810	230
WCM0402-47NT	47 / 200	G , J , K	26	2100	0.830	210
WCM0402-51NT	51 / 200	G , J	25	1750	0.820	210
WCM0402-56NT	56 / 200	G , J	22	1760	0.970	200
WCM0402-68NT	68 / 200	G , J	22	1620	1.120	180
WCM0402-82NT	82 / 150	G , J	20	1500	1.250	150
WCM0402-R10T	100 / 150	G , J	20	1300	2.520	120
WCM0402-R12T	120 / 150	G , J	20	1100	2.660	110
WCM0603-1N6T	1.6 / 250	B , S	24 / 250	12500	0.030	700
WCM0603-1N8T	1.8 / 250	B , S	16 / 250	12500	0.045	700
WCM0603-2N2T	2.2 / 250	B , S	13 / 250	12500	0.250	700
WCM0603-3N3T	3.3 / 250	B , S	30 / 250	5900	0.045	700
WCM0603-3N6T	3.6 / 250	B , S	22 / 250	5900	0.063	700
WCM0603-3N9T	3.9 / 250	B , S	22 / 250	6900	0.080	700
WCM0603-4N3T	4.3 / 250	B , S	22 / 250	5900	0.063	700
WCM0603-4N7T	4.7 / 250	B , S	20 / 250	5800	0.085	700
WCM0603-5N1T	5.1 / 250	S , J	20 / 250	5700	0.115	700
WCM0603-5N6T	5.6 / 250	S , J	20 / 250	5800	0.160	700
WCM0603-6N3T	6.3 / 250	J , K	26 / 250	5700	0.115	700
WCM0603-6N8T	6.8 / 250	J , K	27 / 250	5800	0.125	700
WCM0603-7N5T	7.5 / 250	J , K	28 / 250	4800	0.115	700
WCM0603-8N2T	8.2 / 250	J , K	30 / 250	4700	0.125	700
WCM0603-8N7T	8.7 / 250	J , K	28 / 250	4600	0.109	700
WCM0603-9N1T	9.1 / 250	J , K	28 / 250	4600	0.120	700
WCM0603-9N5T	9.5 / 250	G , J , K	28 / 250	5400	0.145	700
WCM0603-10NT	10 / 250	G , J , K	31 / 250	4800	0.145	700
WCM0603-11NT	11 / 250	G , J , K	30 / 250	4000	0.145	700
WCM0603-12NT	12 / 250	G , J , K	35 / 250	4000	0.145	700
WCM0603-15NT	15 / 250	G , J , K	35 / 250	4000	0.180	700



PART NUMBER	L(nH)/@MHz	Inductance tolerance	Q min @250MHz	SRF(MHz) min.	DCR (ΩMax)	IDC(mA) (Max)
WCM0603-16NT	16 / 250	G , J , K	34 / 250	3300	0.170	700
WCM0603-18NT	18 / 250	G , J , K	35 / 250	3100	0.180	700
WCM0603-19NT	19 / 250	G , J , K	35 / 250	3000	0.190	700
WCM0603-20NT	20 / 250	G , J , K	38 / 250	3000	0.180	700
WCM0603-22NT	22 / 250	G , J , K	38 / 250	3000	0.205	700
WCM0603-23NT	23 / 250	G , J , K	38 / 250	2850	0.205	700
WCM0603-24NT	24 / 250	G , J , K	36 / 250	2650	0.205	700
WCM0603-25NT	25 / 250	G , J , K	38 / 250	2800	0.210	600
WCM0603-27NT	27 / 250	G , J , K	40 / 250	2800	0.220	600
WCM0603-30NT	30 / 250	G , J , K	37 / 250	2250	0.220	600
WCM0603-33NT	33 / 250	G , J , K	40 / 250	2300	0.240	600
WCM0603-36NT	36 / 250	G , J , K	37 / 250	2080	0.250	600
WCM0603-39NT	39 / 250	G , J , K	40 / 250	2200	0.260	600
WCM0603-43NT	43 / 250	G , J , K	38 / 250	2000	0.280	600
WCM0603-47NT	47 / 200	G , J , K	38 / 200	2000	0.280	600
WCM0603-56NT	56 / 200	G , J , K	38 / 200	1900	0.310	600
WCM0603-62NT	62 / 200	G , J , K	37 / 200	1800	0.330	600
WCM0603-68NT	68 / 200	G , J , K	37 / 200	1700	0.340	600
WCM0603-72NT	72 / 150	G , J , K	34 / 150	1700	0.490	400
WCM0603-82NT	82 / 150	G , J , K	34 / 150	1700	0.540	400
WCM0603-91NT	91 / 150	G , J , K	34 / 150	1500	0.560	400
WCM0603-R10T	100 / 150	G , J , K	34 / 150	1400	0.580	400
WCM0603-R11T	110 / 150	G , J , K	32 / 150	1350	0.610	300
WCM0603-R12T	120 / 150	G , J , K	32 / 150	1300	0.650	300
WCM0603-R15T	150 / 150	G , J , K	28 / 150	990	0.920	280
WCM0603-R17T	170 / 100	G , J , K	25 / 100	990	1.150	240
WCM0603-R18T	180 / 100	G , J , K	25 / 100	990	1.250	240
WCM0603-R19T	190 / 100	G , J , K	25 / 100	990	1.350	200
WCM0603-R20T	200 / 100	G , J , K	25 / 100	990	1.500	200
WCM0603-R22T	220 / 100	G , J , K	25 / 100	900	1.600	250
WCM0603-R27T	270 / 100	G , J , K	24 / 100	900	2.000	170
WCM0603-R33T	330 / 100	G , J , K	25 / 100	900	2.750	100
WCM0603-R34T	340 / 100	G , J , K	25 / 100	900	2.900	100
WCM0603-R39T	390 / 100	G , J , K	25 / 100	900	3.150	100
WCM0603-R47T	470 / 100	G , J , K	25 / 100	750	4.000	80



PART NUMBER	L(nH)/@MHz	Inductance tolerance	Q min / @MHz	SRF(MHz) min.	DCR (ΩMax)	IDC(mA) (Max)
WCM0805-2N8T	2.8 / 250	B , S	55 / 1500	7900	0.06	800
WCM0805-3N0T	3.0 / 250	B , S	55 / 1500	7900	0.08	800
WCM0805-3N3T	3.3 / 250	B , S	45 / 1500	7900	0.12	600
WCM0805-5N6T	5.6 / 250	B , S	65 / 1000	5500	0.08	600
WCM0805-6N2T	6.2 / 250	B , S	50 / 1000	5500	0.11	600
WCM0805-6N8T	6.8 / 250	J , K	50 / 1000	5500	0.11	600
WCM0805-7N5T	7.5 / 250	J , K	50 / 1000	4500	0.14	600
WCM0805-8N2T	8.2 / 250	J , K	50 / 1000	4700	0.16	600
WCM0805-10NT	10 / 250	G , J , K	60 / 500	4200	0.10	600
WCM0805-12NT	12 / 250	G , J , K	50 / 500	4000	0.15	600
WCM0805-15NT	15 / 250	G , J , K	50 / 500	3400	0.17	600
WCM0805-18NT	18 / 250	G , J , K	50 / 500	3300	0.20	600
WCM0805-22NT	22 / 250	G , J , K	55 / 500	2600	0.22	500
WCM0805-24NT	24 / 250	G , J , K	50 / 500	2000	0.22	500
WCM0805-27NT	27 / 250	G , J , K	55 / 500	2500	0.25	500
WCM0805-33NT	33 / 250	G , J , K	60 / 500	2050	0.27	500
WCM0805-36NT	36 / 250	G , J , K	55 / 500	1700	0.27	500
WCM0805-39NT	39 / 250	G , J , K	60 / 500	2000	0.29	500
WCM0805-43NT	43 / 200	G , J , K	60 / 500	1650	0.34	500
WCM0805-47NT	47 / 200	G , J , K	60 / 500	1650	0.31	500
WCM0805-56NT	56 / 200	G , J , K	60 / 500	1550	0.34	500
WCM0805-68NT	68 / 200	G , J , K	60 / 500	1450	0.38	500
WCM0805-75NT	75 / 200	G , J , K	60 / 500	1400	0.40	400
WCM0805-82NT	82 / 150	G , J , K	65 / 500	1300	0.42	400
WCM0805-91NT	91 / 150	G , J , K	65 / 500	1200	0.48	400
WCM0805-R10T	100 / 150	G , J , K	65 / 500	1200	0.46	400
WCM0805-R11T	110 / 150	G , J , K	50 / 250	1000	0.48	400
WCM0805-R12T	120 / 150	G , J , K	50 / 250	1100	0.51	400
WCM0805-R15T	150 / 100	G , J , K	50 / 250	920	0.56	400
WCM0805-R16T	160 / 100	G , J , K	50 / 250	900	0.60	400
WCM0805-R18T	180 / 100	G , J , K	50 / 250	870	0.64	400
WCM0805-R20T	200 / 100	G , J , K	50 / 250	865	0.68	400
WCM0805-R22T	220 / 100	G , J , K	50 / 250	850	0.70	400
WCM0805-R24T	240 / 100	G , J , K	44 / 250	690	1.00	350
WCM0805-R25T	250 / 100	G , J , K	48 / 250	680	1.00	350



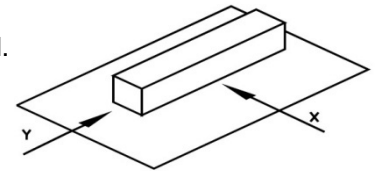
PART NUMBER	L(nH)/@MHz	Inductance tolerance	Q min / @MHz	SRF(MHz) min.	DCR (ΩMax)	IDC(mA) (Max)
WCM0805-R27T	270 / 100	G , J , K	48 / 250	650	1.00	350
WCM0805-R33T	330 / 100	G , J , K	48 / 250	750	1.40	310
WCM0805-R39T	390 / 100	G , J , K	48 / 250	560	1.50	290
WCM0805-R47T	470 / 50	G , J , K	30 / 100	375	1.76	250
WCM0805-R56T	560 / 25	G , J , K	23 / 50	340	1.90	230
WCM0805-R62T	620 / 25	G , J , K	23 / 50	220	2.20	210
WCM0805-R68T	680 / 25	G , J , K	23 / 50	188	2.20	190
WCM0805-R75T	750 / 25	G , J , K	23 / 50	200	2.30	180
WCM0805-R82T	820 / 25	G , J , K	23 / 50	215	2.35	180
WCM0805-1R0T	1000 / 25	G , J , K	22 / 50	200	2.45	180
WCM0805-1R5T	1500 / 7.9	G , J , K	16 / 7.9	120	2.50	170
WCM0805-1R8T	1800 / 7.9	G , J , K	16 / 7.9	80	2.50	170
WCM0805-2R2T	2200 / 7.9	G , J , K	16 / 7.9	60	2.70	160
WCM0805-2R7T	2700 / 7.9	G , J , K	16 / 7.9	50	3.80	160
WCM1008-10NT	10 / 50	G , J , K	50 / 500	4100	0.08	1000
WCM1008-12NT	12 / 50	G , J , K	50 / 500	3300	0.09	1000
WCM1008-15NT	15 / 50	G , J , K	50 / 500	2500	0.16	1000
WCM1008-18NT	18 / 50	G , J , K	50 / 350	2500	0.11	1000
WCM1008-22NT	22 / 50	G , J , K	55 / 350	2400	0.12	1000
WCM1008-27NT	27 / 50	G , J , K	50 / 350	1600	0.13	1000
WCM1008-33NT	33 / 50	G , J , K	60 / 350	1600	0.14	1000
WCM1008-39NT	39 / 50	G , J , K	60 / 350	1500	0.15	1000
WCM1008-47NT	47 / 50	G , J , K	65 / 350	1500	0.16	1000
WCM1008-56NT	56 / 50	G , J , K	65 / 350	1300	0.18	1000
WCM1008-68NT	68 / 50	G , J , K	65 / 350	1300	0.20	1000
WCM1008-82NT	82 / 50	G , J , K	60 / 350	1000	0.22	1000
WCM1008-R10T	100 / 25	G , J , K	60 / 350	1000	0.56	650
WCM1008-R12T	120 / 25	G , J , K	60 / 350	950	0.63	650
WCM1008-R15T	150 / 25	G , J , K	45 / 100	850	0.70	580
WCM1008-R18T	180 / 25	G , J , K	45 / 100	750	0.77	620
WCM1008-R22T	220 / 25	G , J , K	45 / 100	700	0.84	500
WCM1008-R27T	270 / 25	G , J , K	45 / 100	600	0.91	500
WCM1008-R33T	330 / 25	G , J , K	45 / 100	570	1.05	450



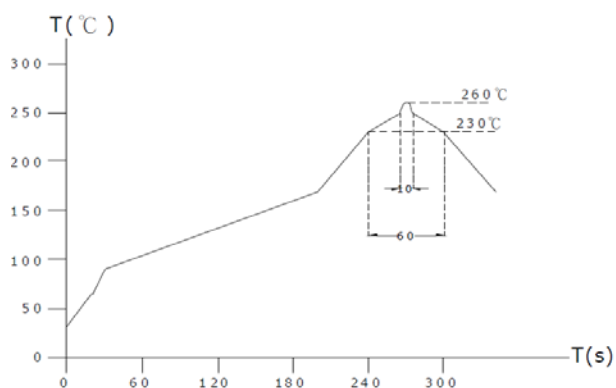
PART NUMBER	L(nH)/@MHz	Inductance tolerance	Q min / @MHz	SRF(MHz) min.	DCR (ΩMax)	IDC(mA) (Max)
WCM1008-R39T	390 / 25	G , J , K	45 / 100	500	1.12	470
WCM1008-R47T	470 / 25	G , J , K	45 / 100	450	1.19	470
WCM1008-R56T	560 / 25	G , J , K	45 / 100	415	1.33	400
WCM1008-R62T	620 / 25	G , J , K	45 / 100	375	1.40	300
WCM1008-R68T	680 / 25	G , J , K	45 / 100	375	1.47	400
WCM1008-R75T	750 / 25	G , J , K	45 / 100	360	1.54	360
WCM1008-R82T	820 / 25	G , J , K	45 / 100	350	1.61	400
WCM1008-R91T	910 / 25	G , J , K	35 / 50	320	1.68	380
WCM1008-1R0T	1000 / 25	G , J , K	35 / 50	290	1.75	370
WCM1008-1R2T	1200 / 7.9	G , J , K	30 / 50	250	2.00	310
WCM1008-1R5T	1500 / 7.9	G , J , K	28 / 50	200	2.30	330
WCM1008-1R8T	1800 / 7.9	G , J , K	28 / 50	160	2.60	300
WCM1008-2R2T	2200 / 7.9	G , J , K	28 / 50	160	2.80	280
WCM1008-2R7T	2700 / 7.9	G , J , K	22 / 25	135	3.20	290
WCM1008-3R3T	3300 / 7.9	G , J , K	22 / 25	110	3.40	290
WCM1008-3R9T	3900 / 7.9	G , J , K	20 / 25	100	3.60	260
WCM1008-4R7T	4700 / 7.9	G , J , K	20 / 25	90	4.00	260
WCM1008-5R6T	5600 / 7.9	G , J , K	18 / 7.9	40	4.20	240
WCM1008-6R8T	6800 / 7.9	G , J , K	18 / 7.9	40	4.90	200
WCM1008-8R2T	8200 / 7.9	G , J , K	18 / 7.9	25	6.00	170
WCM1008-100T	10000 / 2.5	G , J , K	18 / 7.9	25	8.00	150

●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

