

High Frequency Ceramic Chip Inductor

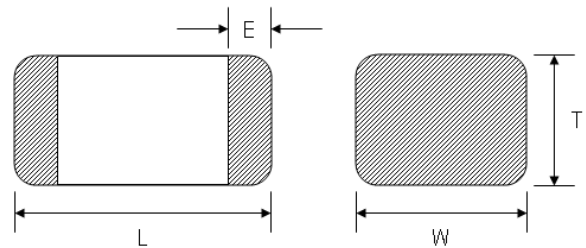
Application Field

RF and wireless communication, information technology equipment which includes computer, telecommunications, radar detectors, automotive electronics, cellular phones, pagers, audio equipment, PDAs, high-speed communication devices, WALN , keyless remote system and low-voltage power supply modules.

Directions

- ◎ Impedance Range : 1 to 390 nH
- ◎ Operating Temperature Range : -55°C to +125°C
- ◎ Soldering Method : Reflow or Wave Soldering
- ◎ Packaging Method : Tape & Reel (per EIA Specifications)
- ◎ Storage Temperature : -40°C to +85°C , 70% RH Max

Dimensions and footprint (Unit : mm)



Unit : mm(inches)

Size	Length(L)	Width(W)	Thickness(T)	Electrode Width(E)
MCI-060303	0.60±0.030(0.024±0.001)	0.30±0.030(0.012±0.001)	0.30±0.030(0.012±0.001)	0.15±0.050(0.006±0.002)
MCI-100505	1.00±0.100(0.040±0.004)	0.50±0.100(0.020±0.004)	0.50±0.100(0.020±0.004)	0.25±0.100(0.010±0.004)
MCI-160808	1.60±0.150(0.063±0.006)	0.80±0.150(0.031±0.006)	0.80±0.150(0.031±0.006)	0.30±0.200(0.012±0.008)
MCI-201209	2.00±0.200(0.079±0.008)	1.25±0.200(0.049±0.008)	0.90±0.200(0.035±0.008)	0.50±0.300(0.020±0.012)

Product Detail

Electrical Characteristics			Test Instruments
Z	(Ref. Page 7~10)	TEST FREQ : (Ref. Page 7~10)MHz TEST LEVEL : 250 mV	HP4291B RF IMPEDANCE / MATERIAL ANALYZER HP4338A/B MILLIOHMMETER Agilent 8720ES S-PARAMETER NETWORK ANALYZER HP6632B SYSTEM DC POWER SUPPLY
θ	NA		
SRF	NA		
DCR	(Ref. Page 7~10)		
IDC	mA (Ref. Page 7~10)		

Part Number Code

MCI - 160808 - 12N K
 1 2 3 4

- 1、Product Code
 2、Dimensions Code
 3、Inductance = Decimal Point
 4、Tolerance : S = $\pm 0.3\text{nH}$ 、J = $\pm 5\%$ 、K = $\pm 10\%$ 、M = $\pm 20\%$

Specification

Part No.	Inductance (nH) at 100MHz	Tolerance	Q Min. MHz	Q(Typical) MHz			SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
			100	100	500	800			
MCI-060303-1N0	1.0	S	4	5	12	16	10000	0.14	250
MCI-060303-1N2	1.2	S	4	5	12	16	10000	0.14	250
MCI-060303-1N5	1.5	S	4	5	12	16	9000	0.18	230
MCI-060303-1N8	1.8	S	4	5	13	18	8500	0.19	200
MCI-060303-2N2	2.2	S	4	5	13	18	8500	0.22	200
MCI-060303-1N7	2.7	S	5	5	13	18	7700	0.25	200
MCI-060303-3N3	3.3	S,K	5	5	13	18	6700	0.30	180
MCI-060303-3N9	3.9	S,K	5	5	15	18	6000	0.30	170
MCI-060303-4N7	4.7	S,K	5	6	15	20	5300	0.40	150
MCI-060303-5N1	5.1	S,K	5	6	15	20	4700	0.40	150
MCI-060303-5N6	5.6	S,K	5	6	15	20	4200	0.40	150
MCI-060303-6N8	6.8	J,K	5	6	15	20	3500	0.50	150
MCI-060303-8N2	8.2	J,K	5	6	13	20	3200	0.55	150
MCI-060303-10N	10	J,K	5	6	13	17	2800	0.65	150
MCI-060303-12N	12	J,K	5	6	13	17	2400	0.70	100
MCI-060303-15N	15	J,K	5	6	14	18	2200	0.80	100
MCI-060303-18N	18	J,K	5	7	15	19	2100	0.90	100
MCI-060303-22N	22	J,K	5	7	15	19	1800	1.20	100
MCI-060303-27N	27	J,K	5	7	15	19	1800	1.80	50
MCI-060303-33N	33	J,K	5	6	12	14	1700	2.10	50
MCI-060303-39N	39	J,K	5	6	12	14	1500	2.40	50
MCI-060303-47N	47	J,K	5	6	11	13	1300	2.80	50
MCI-060303-56N	56	J,K	5	6	11	12	1100	3.00	50

Part No.	Inductance (nH) at 100MHz	Q Min. MHz	Q(Typical) MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
		100	800			
MCI-100505-1N0	1.0	8	40	10000	0.12	300
MCI-100505-1N1	1.1	8	40	10000	0.12	300
MCI-100505-1N2	1.2	8	40	10000	0.12	300
MCI-100505-1N3	1.3	8	40	10000	0.13	300
MCI-100505-1N5	1.5	8	40	6000	0.13	300
MCI-100505-1N6	1.6	8	41	6000	0.14	300
MCI-100505-1N8	1.8	8	41	6000	0.14	300
MCI-100505-2N0	2.0	8	36	6000	0.16	300

Part No.	Inductance (nH) at 100MHz	Q Min. MHz	Q(Typical) MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
		100	800			
MCI-100505-2N2	2.2	8	36	6000	0.16	300
MCI-100505-2N4	2.4	8	36	6000	0.17	300
MCI-100505-2N7	2.7	8	38	6000	0.17	300
MCI-100505-3N0	3.0	8	37	6000	0.19	300
MCI-100505-3N3	3.3	8	37	6000	0.19	300
MCI-100505-3N6	3.6	8	32	5000	0.22	300
MCI-100505-3N9	3.9	8	32	4000	0.22	300
MCI-100505-4N3	4.3	8	32	4000	0.24	300
MCI-100505-4N7	4.7	8	37	4000	0.24	300
MCI-100505-5N1	5.1	8	35	4000	0.27	300
MCI-100505-5N6	5.6	8	35	4000	0.27	300
MCI-100505-6N2	6.2	8	34	3900	0.32	300
MCI-100505-6N8	6.8	8	34	3900	0.32	300
MCI-100505-8N2	8.2	8	34	3500	0.37	300
MCI-100505-10N	10	8	31	3200	0.42	300
MCI-100505-12N	12	8	31	2600	0.50	300
MCI-100505-15N	15	8	30	2300	0.55	300
MCI-100505-18N	18	8	30	2000	0.65	300
MCI-100505-22N	22	8	30	1600	0.80	300
MCI-100505-27N	27	8	28	1400	0.90	300
MCI-100505-33N	33	8	26	1200	1.00	200
MCI-100505-39N	39	8	24	1100	1.20	200
MCI-100505-47N	47	8	23	900	1.30	200
MCI-100505-56N	56	8	21	750	1.40	200
MCI-100505-68N	68	8	19	750	1.40	180
MCI-100505-82N	82	8	16	600	1.60	150
MCI-100505-R10	100	8	-	600	1.60	100
MCI-100505-R12	120	8	-	600	1.60	100

Part No.	Inductance (nH) at 100MHz	Q Min. MHz	Q(Typical) MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
		100	800			
MCI-160808-1N2	1.2	8	47	6000	0.10	1000
MCI-160808-1N5	1.5	8	47	6000	0.10	1000
MCI-160808-1N8	1.8	8	55	6000	0.10	1000
MCI-160808-2N2	2.2	8	49	6000	0.10	1000
MCI-160808-2N7	2.7	10	48	6000	0.10	1000
MCI-160808-3N3	3.3	10	51	6000	0.13	1000
MCI-160808-3N9	3.9	10	48	6000	0.15	1000
MCI-160808-4N7	4.7	10	48	4000	0.20	1000
MCI-160808-5N6	5.6	10	46	4000	0.23	600
MCI-160808-6N8	6.8	10	48	4000	0.25	600
MCI-160808-8N2	8.2	10	50	3500	0.28	600
MCI-160808-10N	10	12	47	3200	0.30	600
MCI-160808-12N	12	12	45	2600	0.35	600
MCI-160808-15N	15	12	48	2300	0.40	600
MCI-160808-18N	18	12	47	2000	0.45	600
MCI-160808-22N	22	12	49	1600	0.50	600

Part No.	Inductance (nH) at 100MHz	Q Min. MHz	Q(Typical) MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
		100	800			
MCI-160808-27N	27	12	47	1400	0.55	600
MCI-160808-33N	33	12	46	1200	0.60	600
MCI-160808-39N	39	12	46	1100	0.65	500
MCI-160808-47N	47	12	39	900	0.70	500
MCI-160808-56N	56	12	37	900	0.75	500
MCI-160808-68N	68	12	36	700	0.80	400
MCI-160808-82N	82	12	29	600	0.85	300
MCI-160808-R10	100	12	16	600	0.90	300
MCI-160808-R12	120	8	17	500	1.00	300
MCI-160808-R15	150	8	-	500	1.20	300
MCI-160808-R18	180	8	-	400	1.30	300
MCI-160808-R22	220	8	-	400	1.50	300
MCI-160808-R27	270	8	-	400	1.50	300

Part No.	Inductance (nH) at 100MHz	Q Min. MHz	Q(Typical) MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
		100	800			
MCI-201209-1N5	1.5	10	61	4000	0.10	300
MCI-201209-1N8	1.8	10	55	4000	0.10	300
MCI-201209-2N2	2.2	10	53	4000	0.10	300
MCI-201209-2N7	2.7	12	56	4000	0.10	300
MCI-201209-3N3	3.3	12	47	4000	0.13	300
MCI-201209-3N9	3.9	12	54	4000	0.15	300
MCI-201209-4N7	4.7	12	55	3500	0.20	300
MCI-201209-5N6	5.6	15	60	3200	0.23	300
MCI-201209-6N8	6.8	15	63	2800	0.25	300
MCI-201209-8N2	8.2	15	62	2400	0.28	300
MCI-201209-10N	10	15	60	2100	0.30	300
MCI-201209-12N	12	15	60	1900	0.35	300
MCI-201209-15N	15	15	63	1600	0.40	300
MCI-201209-18N	18	15	60	1500	0.45	300
MCI-201209-22N	22	18	60	1400	0.50	300
MCI-201209-27N	27	18	58	1300	0.55	300
MCI-201209-33N	33	18	55	1200	0.60	300
MCI-201209-39N	39	18	47	1000	0.65	300
MCI-201209-47N	47	18	43	900	0.70	300
MCI-201209-56N	56	18	39	800	0.75	300
MCI-201209-68N	68	18	30	700	0.80	300
MCI-201209-82N	82	18	-	600	0.90	300
MCI-201209-R10	100	18	-	600	0.90	300
MCI-201209-R12	120	13	-	500	0.95	300
MCI-201209-R15	150	13	-	500	1.00	300
MCI-201209-R18	180	13	-	400	1.10	300
MCI-201209-R22	220	12	-	350	1.20	300
MCI-201209-R27	270	12	-	300	1.30	300
MCI-201209-R33	330	12	-	250	1.40	300
MCI-201209-R39	390	10	-	250	1.30	300