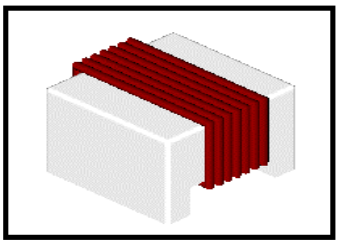
Chilisin Electronics Singapore Pte Ltd

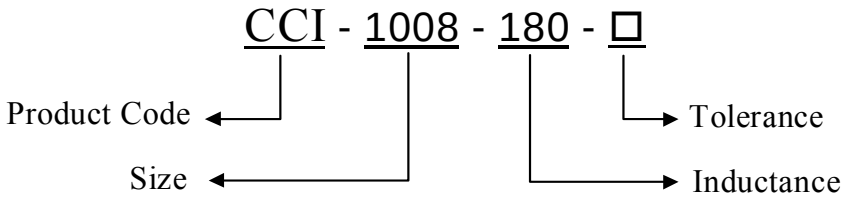
SMD Ceramic Chip Inductors, CCI Series



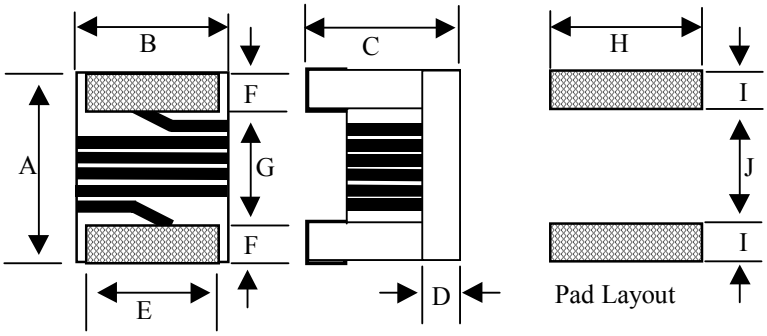
Feature:

This type of Miniature SMD Ceramic Chip Inductor is specially designed for the needs of today's high frequency related product. These products deliver very high SRF and also excellent Q factor. With the non-magnetic coil form it's assure utmost temperature stability, predictability and batch consistency.

Ordering Code:



Dimension in mm:



Type	A	B	C	D	E	F	G	H	I	J
CCI-0603	1.80	1.12	1.02	0.38	0.76	0.33	0.86	1.02	0.64	0.64
CCI-0805	2.41	1.78	1.78	0.51	1.27	0.51	1.02	1.78	0.96	0.86
CCI-1008	2.92	2.79	2.29	0.51	2.03	0.51	1.52	2.54	0.96	1.50

Electrical:

Part Number	Inductance	Current
CCI-0603 - Series	1.6 nH to 270nH	700mA to 170mA
CCI-0805 - Series	2.8 nH to 820nH	800mA to 180mA
CCI-1008 - Series	10 nH to 910nH	1000mA to 3800mA

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ELECTRICAL CHARACTERISTICS

Part Number	Inductance (nH)	Test Freq. MHz	Q Min	SRF MHz min	RDC Ω max	IDC mA max	900 MHz		1.7 GHz	
							L Typ.	Q Typ.	L Typ.	Q Typ.
CCI-0603-1N6-K	1.6 ± 10%	250	24	12500	0.030	700	1.67	49	1.65	63
CCI-0603-1N8-K	1.8 ± 10%	250	16	12500	0.043	700	1.63	35	1.66	150
CCI-0603-3N6-K	3.6 ± 10%	250	22	5900	0.063	700	3.72	53	3.71	65
CCI-0603-3N9-K	3.9 ± 10%	250	22	6900	0.080	700	3.95	49	3.96	67
CCI-0603-4N3-K	4.3 ± 10%	250	22	5900	0.063	700	4.32	50	4.33	70
CCI-0603-4N7-K	4.7 ± 10%	250	20	5800	0.116	700	4.72	47	4.75	57
CCI-0603-5N1-K	5.1 ± 10%	250	20	5700	0.140	700	4.93	47	4.95	56
CCI-0603-6N3-K	6.3 ± 10%	250	20	5700	0.140	700	5.5	47	6.1	60
CCI-0603-6N8-K	6.8 ± 10%	250	27	5800	0.110	700	6.75	60	7.1	81
CCI-0603-7N5-K	7.5 ± 10%	250	28	4800	0.106	700	7.70	60	7.82	65
CCI-0603-8N2-J	8.2 ± 5%	250	28	4700	0.109	700	8.30	60	8.50	60
CCI-0603-8N7-J	8.7 ± 5%	250	28	4600	0.109	700	8.86	62	9.32	58
CCI-0603-9N5-J	9.5 ±5%	250	28	5400	0.135	700	9.70	59	9.92	61
CCI-0603-10N-J	10.0 ±5%	250	31	4800	0.130	700	10	66	10.6	83
CCI-0603-11N-J	11.0 ± 5%	250	33	4000	0.086	700	11	53	11.5	56
CCI-0603-12N-J	12.0 ± 5%	250	35	4000	0.130	700	12.3	72	13.5	83
CCI-0603-15N-J	15.0 ± 5%	250	35	4000	0.170	700	15.4	64	16.8	89
CCI-0603-16N-J	16.0 ± 5%	250	34	3300	0.104	700	16.2	55	17.3	52
CCI-0603-18N-J	18.0 ± 5%	250	35	3100	0.170	700	18.7	70	21.4	69
CCI-0603-22N-J	22.0 ± 5%	250	38	3000	0.190	700	22.8	73	26.1	71

Inductance	=	HP-4191A
Q Factor , SRF	=	HP-4291A
RDC	=	Digital Multimeter SC-7401
Temperature Rise	=	15˚C
Operating Temperature	=	-40˚C to +125˚C

Next

M = ± 20%, K = ± 10% , J = ± 5% , G = ± 2%

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ELECTRICAL CHARACTERISTICS

Part Number	Inductance (nH)	Test Freq. MHz	Q Min	SRF MHz min	RDC Ω max	IDC mA max	900 MHz		1.7 GHz	
							L Typ.	Q Typ.	L Typ.	Q Typ.
CCI-0603-24N-J	24.0 ± 5%	250	37	2650	0.135	700	24.5	45	28.7	39
CCI-0603-27N-J	27.0 ± 5%	250	40	2800	0.220	600	29.2	74	34.6	65
CCI-0603-30N-J	30.0 ± 5%	250	37	2250	0.144	600	31.4	47	39.9	28
CCI-0603-33N-J	33.3 ± 5%	250	40	2300	0.220	600	36	67	49.5	42
CCI-0603-36N-J	36.0 ± 5%	250	38	2080	0.250	600	39.4	47	52.7	24
CCI-0603-39N-J	39.0 ± 5%	250	40	2200	0.250	600	42.7	60	60.2	40
CCI-0603-43N-J	43.0 ± 5%	250	39	2000	0.280	600	47	44	64.9	21
CCI-0603-47N-J	47.0 ± 5%	200	38	2000	0.280	600	52.2	62	77.2	35
CCI-0603-56N-J	56.0 ± 5%	200	38	1900	0.310	600	62.5	56	97	26
CCI-0603-68N-J	68.0 ± 5%	200	37	1700	0.340	600	80.5	54	168	21
CCI-0603-72N-J	72.0 ± 5%	150	34	1700	0.490	400	82	53	135	20
CCI-0603-82N-J	82.0 ± 5%	150	34	1700	0.540	400	96.2	54	177	21
CCI-0603-R10-J	100.0 ± 5%	150	34	1400	0.580	400	124	49	-	-
CCI-0603-R11-J	110.0 ± 5%	150	32	1350	0.610	300	138	43	-	-
CCI-0603-R12-J	120.0 ± 5%	150	32	1300	0.650	300	165	39	-	-
CCI-0603-R15-J	150.0 ± 5%	150	28	990	0.920	280	250	25	-	-
CCI-0603-R18-JJ	180.0 ±5%	100	25	990	1.250	240	305	22	-	-
CCI-0603-R22-J	220.0 ±5%	100	25	900	1.900	200	480	8	-	-
CCI-0603-R27-J	270.0 ± 5%	100	24	900	2.800	170	980	4	-	-

Inductance = HP-4191A
Q Factor , SRF = HP-4291A
RDC = Digital Multimeter SC-7401
Temperature Rise = 15˚C
Operating Temperature = -40˚C to +125˚C

Next

M = ± 20%, K = ± 10% , J = ± 5% , G = ± 2%

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ELECTRICAL CHARACTERISTICS

Part Number	Inductance (nH)	Test Freq. MHz	Q Min	Test Freq. MHz	SRF MHz min	RDC Ω Max	IDC mA Max
CCI-0805-2N8-K	2.8 ± 10%	250	70	1500	7900	0.06	800
CCI-0805-3N0-K	3.0 ± 10%	250	65	1500	7900	0.06	800
CCI-0805-3N3-K	3.3 ± 10%	250	50	1500	7900	0.08	600
CCI-0805-6N8-K	6.8 ± 10%	250	50	1000	5500	0.11	600
CCI-0805-7N5-K	7.5 ± 10%	250	50	1000	4500	0.14	600
CCI-0805-8N2-K	8.2 ± 10%	250	50	1000	4700	0.12	600
CCI-0805-10N-K	10.0 ± 10%	250	60	500	4200	0.10	600
CCI-0805-12N-K	12.0 ± 10%	250	50	500	4000	0.15	600
CCI-0805-15N-J	15.0 ± 5%	250	50	500	3400	0.17	600
CCI-0805-18N-J	18.0 ± 5%	250	50	500	3300	0.20	600
CCI-0805-22N-J	22.0 ± 5%	250	55	500	2600	0.22	500
CCI-0805-24N-J	24.0 ± 5%	250	55	500	2000	0.22	500
CCI-0805-27N-J	27.0 ± 5%	250	55	500	2500	0.25	500
CCI-0805-33N-J	33.0 ± 5%	250	60	500	2050	0.27	500
CCI-0805-36N-J	36.0 ± 5%	250	60	500	1700	0.29	500
CCI-0805-39N-J	39.0 ± 5%	250	60	500	2000	0.29	500
CCI-0805-43N-J	43.0 ± 5%	200	60	500	1650	0.34	500
CCI-0805-47N-J	47.0 ± 5%	200	60	500	1650	0.31	500

Inductance	=	HP-4286A
Q Factor , SRF	=	HP-8753D/HP-4286A
RDC	=	Digital Multimeter SC-7401
Temperature Rise	=	15˚C
Operating Temperature	=	-40˚C to +125˚C

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M = ± 20%, K = ± 10% , J = ± 5% , G = ± 2%

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ELECTRICAL CHARACTERISTICS

Part Number	Inductance (nH)	Test Freq. MHz	Q Min	Test Freq. MHz	SRF MHz min	RDC Ω Max	IDC mA Max
CCI-0805-56N-J	56.0 ± 5%	200	60	500	1550	0.34	500
CCI-0805-68N-J	68.0 ± 5%	200	60	500	1450	0.38	500
CCI-0805-82N-J	82.0 ± 5%	150	65	500	1300	0.42	400
CCI-0805-91N-J	91.0 ± 5%	150	65	500	1200	0.48	400
CCI-0805-R10-J	100.0 ± 5%	150	65	500	1200	0.46	400
CCI-0805-R11-J	110.0 ± 5%	150	50	250	1000	0.48	400
CCI-0805-R12-J	120.0 ± 5%	150	50	250	1100	0.51	400
CCI-0805-R15-	150.0 ± 5%	100	50	250	920	0.56	400
CCI-0805-R18-	180.0 ± 5%	100	50	250	870	0.64	400
CCI-0805-R22-J	220.0 ± 5%	100	50	250	850	0.70	400
CCI-0805-R24-J	240.0 ± 5%	100	44	250	690	1.00	350
CCI-0805-R27-J	270.0 ± 5%	100	48	250	650	1.00	350
CCI-0805-R33-J	330.0 ± 5%	100	48	250	600	1.40	310
CCI-0805-R39-J	390.0 ± 5%	100	48	250	560	1.50	290
CCI-0805-R47-J	470.0 ± 5%	50	33	100	375	1.76	250
CCI-0805-R56-J	560.0 ± 5%	50	25	50	340	1.90	230
CCI-0805-R68-J	680.0 ± 5%	25	23	50	188	2.20	190
CCI-0805-R82-J	820.0 ± 5%	25	23	50	215	2.35	180

Inductance	=	HP-4286A
Q Factor , SRF	=	HP-4286A/HP4286A
RDC	=	Digital Multimeter SC-7401
Temperature Rise	=	15˚C
Operating Temperature	=	-40˚C to +125˚C

Next

M = ± 20%, K = ± 10% , J = ± 5% , G = ±2%

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ELECTRICAL CHARACTERISTICS

Part Number	Inductance (nH)	Test Freq. MHz	Q Min	Test Freq. MHz	SRF MHz min	RDC Ω Max	IDC mA Max
CCI -1008-10N-M	10 ± 20%	50	50	500	4100	0.08	1000
CCI -1008-12N-M	12 ± 20%	50	50	500	3300	0.09	1000
CCI -1008-15N-M	15 ± 20%	50	50	500	2500	0.10	1000
CCI -1008-18N-M	18 ± 20%	50	50	350	2500	0.11	1000
CCI -1008-22N-M	22 ± 20%	50	55	350	2400	0.12	1000
CCI -1008-27N-M	27 ± 20%	50	55	350	1600	0.13	1000
CCI -1008-33N-M	33 ± 20%	50	60	350	1600	0.14	1000
CCI -1008-39N-M	39 ± 20%	50	60	350	1500	0.15	1000
CCI -1008-47N-M	47 ± 20%	50	65	350	1500	0.16	1000
CCI -1008-56N-K	56 ± 10%	50	65	350	1300	0.18	1000
CCI -1008-68N-K	68 ± 10%	50	65	350	1300	0.20	1000
CCI -1008-82N-K	82 ± 10%	50	60	350	1000	0.22	1000
CCI -1008-R10-K	100 ±10%	25	60	350	1000	0.56	650
CCI -1008-R12-K	120 ±10%	25	60	350	950	0.63	650
CCI -1008-R15-K	150 ± 10%	25	45	100	850	0.70	580
CCI -1008-R18-K	180 ± 10%	25	45	100	750	0.77	620
CCI -1008-R22-K	220 ± 10%	25	45	100	700	0.84	500
CCI -1008-R27-K	270 ±10%	25	45	100	600	0.91	500
CCI -1008-R33-K	330 ± 10%	25	45	100	570	1.05	450
CCI -1008-R39-K	390 ±10%	25	45	100	500	1.12	470
CCI -1008-R47-K	470 ±10%	25	45	100	450	1.19	470
CCI -1008-R56-K	560 ±10%	25	45	100	410	1.33	400
CCI -1008-R62-K	620 ±10%	25	45	100	375	1.40	300
CCI -1008-R68-K	680 ±10%	25	45	100	375	1.47	400
CCI -1008-R75-K	750 ±10%	25	45	100	360	1.54	360
CCI -1008-R82-K	820 ±10%	25	45	100	350	1.61	400
CCI -1008-R91-K	910 ±10%	25	45	100	320	1.68	280

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M = ± 20%, K = ± 10% , J = ± 5% , G = ± 2%

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