

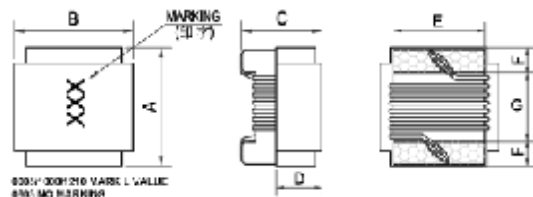
SMDCHGR SERIES

MINIATURE SMD CHIP INDUCTORS

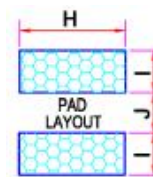
Applications :

- Pagers, Cordless phone.
- High Freq. Communication Products.
- GPS(Global Position System).

Shape and Dimensions (Dimensions are in mm) :



Item	A Max	B Max	C Max	D	E	F	G
0402S	1.19	0.70	0.66	0.25	0.51	0.23	0.56
0603	1.80	1.12	1.02	0.38	0.76	0.33	0.86
0805	2.29	1.73	1.52	0.51	1.27	0.51	1.02
1008	2.92	2.79	2.10	0.51	2.03	0.51	1.52
1210	3.56	2.92	2.23	0.51	2.10	0.51	2.03



Item	H	I	J
0402S	0.66	0.36	0.46
0603	1.02	0.64	0.64
0805	1.78	1.02	0.76
1008	2.54	1.02	1.27
1210	2.54	1.02	1.78

Features :

- Miniature SMD chip inductors designed especially for the need of high frequency applications.
- The ceramic construction delivers the highest possible SRF's and Q values.
- The non-magnetic coilform also assures the utmost In thermal stability, predictability, and batch consistency.
- Their ferrite core inductors have lower DCR and higher current ratings. The inductance values from 1.2 to 10uH.

Characteristics :

- Rated Current: The current when temperature of coil increases up to Max. $\Delta T = 15^{\circ}\text{C}$. ($T_a = 20^{\circ}\text{C}$)
- Operating temp: -40°C to 125°C

Product Identification :

SMD CH G R 1008 - 47N J
 (1) (2) (3) (4) (5) (6) (7)

- (1) Type : Surface Mount Devices.
- (2) Material: CH : Ceramic.
- (3) Terminal G : with Gold wraparound.
- (4) Packaging R : Tape and Reel.
- (5) Dimension: L=0.1 Inch W=0.08 Inch.
- (6) Inductance : 47N for 47 nH.
- (7) Inductance tolerance :
 G: $\pm 2\%$; J: $\pm 5\%$; K: $\pm 10\%$; M: $\pm 20\%$.

Test equipments :

- L&Q&SRF: Agilent E4991A RF Impedance analyzer. with Agilent 16197A test fixture.
- DCR: Milli-ohm meter.
- Electrical specifications at 25°C .



I SMDCHGR0402S series

Part No.	Inductance L (nH)	Tolerance (±%)	Q Min.	Test freq. (MHz) L&Q	SRF (MHz) Min.	DCR (Ω) Max.	Rated Current (mA) Max
SMDCHGR0402S-1N0□	1.0	5 , 10	16	250	12700	0.045	1360
SMDCHGR0402S-1N9□	1.9	5 , 10	16	250	11300	0.070	1040
SMDCHGR0402S-2N0□	2.0	5 , 10	16	250	11100	0.070	1040
SMDCHGR0402S-2N2□	2.2	5 , 10	19	250	10800	0.070	960
SMDCHGR0402S-2N4□	2.4	5 , 10	15	250	10500	0.068	790
SMDCHGR0402S-2N7□	2.7	5 , 10	16	250	10400	0.120	640
SMDCHGR0402S-3N3□	3.3	5 , 10	19	250	7000	0.066	840
SMDCHGR0402S-3N9□	3.9	5 , 10	19	250	6000	0.066	840
SMDCHGR0402S-4N3□	4.3	5 , 10	18	250	6000	0.091	700
SMDCHGR0402S-4N7□	4.7	5 , 10	15	250	4770	0.130	640
SMDCHGR0402S-5N1□	5.1	5 , 10	20	250	4800	0.083	800
SMDCHGR0402S-5N6□	5.6	5 , 10	20	250	4800	0.083	760
SMDCHGR0402S-6N2□	6.2	5 , 10	20	250	4800	0.083	760
SMDCHGR0402S-6N8□	6.8	5 , 10	20	250	4800	0.083	680
SMDCHGR0402S-7N5□	7.5	5 , 10	22	250	4800	0.100	680
SMDCHGR0402S-8N2□	8.2	5 , 10	22	250	4400	0.100	680
SMDCHGR0402S-8N7□	8.7	5 , 10	18	250	4100	0.200	480
SMDCHGR0402S-9N1□	9.1	5 , 10	22	250	4160	0.100	680
SMDCHGR0402S-9N5□	9.5	5 , 10	18	250	4000	0.200	480
SMDCHGR0402S-10N□	10	5 , 10	21	250	3900	0.200	480
SMDCHGR0402S-11N□	11	5 , 10	24	250	3680	0.120	640
SMDCHGR0402S-12N□	12	5 , 10	24	250	3600	0.120	640
SMDCHGR0402S-15N□	15	5 , 10	24	250	3280	0.170	560
SMDCHGR0402S-16N□	16	5 , 10	24	250	3100	0.220	560
SMDCHGR0402S-18N□	18	5 , 10	25	250	3100	0.230	420
SMDCHGR0402S-20N□	20	5 , 10	25	250	3000	0.250	420
SMDCHGR0402S-22N□	22	5 , 10	25	250	2800	0.300	400
SMDCHGR0402S-27N□	27	5 , 10	24	250	2480	0.300	400
SMDCHGR0402S-33N□	33	5 , 10	24	250	2350	0.400	400
SMDCHGR0402S-39N□	39	5 , 10	25	250	2100	0.550	200
SMDCHGR0402S-43N□	43	5 , 10	25	250	2030	0.810	100
SMDCHGR0402S-47N□	47	5 , 10	20	250	2100	0.830	150
SMDCHGR0402S-56N□	56	5 , 10	22	250	1760	0.970	100
SMDCHGR0402S-68N□	68	5 , 10	22	250	1620	1.120	100
SMDCHGR0402S-82N□	82	5 , 10	20	250	1260	1.550	50



I SMDCHGR0603 series

Part No.	Inductance L (nH)	Tolerance (±%)	Q Min.	Test Freq. (MHz) L&Q	SRF (MHz) Min.	DCR (Ω) Max.	Rated Current (mA) Max
SMDCHGR0603-1N6□	1.6	10 , 20	24	250	12500	0.030	700
SMDCHGR0603-1N8□	1.8	10 , 20	16	250	12500	0.045	700
SMDCHGR0603-3N6□	3.6	10 , 20	22	250	5900	0.063	700
SMDCHGR0603-3N9□	3.9	5, 10, 20	22	250	6900	0.080	700
SMDCHGR0603-4N7□	4.7	5, 10, 20	20	250	5800	0.116	700
SMDCHGR0603-5N1□	5.1	5, 10, 20	20	250	5700	0.140	700
SMDCHGR0603-6N8□	6.8	5, 10, 20	27	250	5800	0.110	700
SMDCHGR0603-7N5□	7.5	5, 10, 20	28	250	4800	0.106	700
SMDCHGR0603-8N2□	8.2	5, 10, 20	28	250	4700	0.120	700
SMDCHGR0603-9N5□	9.5	5,10, 20	28	250	5400	0.150	700
SMDCHGR0603-10N□	10	2, 5, 10	31	250	4800	0.130	700
SMDCHGR0603-11N□	11	2, 5, 10	33	250	4000	0.130	700
SMDCHGR0603-12N□	12	2, 5, 10	35	250	4000	0.130	700
SMDCHGR0603-15N□	15	2, 5, 10	35	250	4000	0.170	700
SMDCHGR0603-16N□	16	2, 5, 10	34	250	3300	0.160	700
SMDCHGR0603-18N□	18	2, 5, 10	35	250	3100	0.170	700
SMDCHGR0603-22N□	22	2, 5, 10	38	250	3000	0.190	700
SMDCHGR0603-24N□	24	2, 5, 10	37	250	2650	0.190	700
SMDCHGR0603-27N□	27	2, 5, 10	40	250	2800	0.220	600
SMDCHGR0603-30N□	30	2, 5, 10	37	250	2250	0.220	600
SMDCHGR0603-33N□	33	2, 5, 10	40	250	2300	0.220	600
SMDCHGR0603-36N□	36	2, 5, 10	38	250	2080	0.250	600
SMDCHGR0603-39N□	39	2, 5, 10	40	250	2200	0.250	600
SMDCHGR0603-43N□	43	2, 5, 10	39	250	2000	0.280	600
SMDCHGR0603-47N□	47	2, 5, 10	38	200	2000	0.280	600
SMDCHGR0603-56N□	56	2, 5, 10	38	200	1900	0.310	600
SMDCHGR0603-68N□	68	2, 5, 10	37	200	1700	0.340	600
SMDCHGR0603-72N□	72	2, 5, 10	34	150	1700	0.490	400
SMDCHGR0603-82N□	82	2, 5, 10	34	150	1700	0.540	400
SMDCHGR0603-R10□	100	2, 5, 10	34	150	1400	0.580	400
SMDCHGR0603-R11□	110	2, 5, 10	32	150	1350	0.610	300
SMDCHGR0603-R12□	120	2, 5, 10	32	150	1300	0.750	300
SMDCHGR0603-R15□	150	2, 5, 10	28	150	990	0.920	280
SMDCHGR0603-R18□	180	2, 5, 10	25	100	990	1.350	240
SMDCHGR0603-R22□	220	2, 5, 10	25	100	900	2.100	200
SMDCHGR0603-R27□	270	5, 10, 20	24	100	520	2.800	170



I SMDCHGR0805 series

Part No.	Inductance L (nH)	Tolerance (±%)	Q Min.	Test Freq. (MHz) L&Q	SRF (MHz) Min.	DCR (Ω) Max.	Rated Current (mA) Max
SMDCHGR0805-2N2□	2.2	10 , 20	15	250&1500	6000	0.08	600
SMDCHGR0805-2N7□	2.7	10 , 20	50	250&1500	6000	0.08	600
SMDCHGR0805-3N3□	3.3	10 , 20	35	250&1500	6000	0.08	600
SMDCHGR0805-5N6□	5.6	5, 10, 20	50	250&1000	5500	0.10	600
SMDCHGR0805-6N8□	6.8	5, 10, 20	50	250&1000	5500	0.11	600
SMDCHGR0805-8N2□	8.2	5, 10, 20	50	250&500	4700	0.12	600
SMDCHGR0805-10N□	10	2, 5, 10	50	250&500	4300	0.14	600
SMDCHGR0805-11N□	11	2, 5, 10	50	250&500	4000	0.15	600
SMDCHGR0805-12N□	12	2, 5, 10	50	250&500	4000	0.15	600
SMDCHGR0805-15N□	15	5, 10, 20	50	250&500	3400	0.17	600
SMDCHGR0805-18N□	18	2, 5, 10	50	250&500	3300	0.20	600
SMDCHGR0805-22N□	22	2, 5, 10	55	250&500	2600	0.22	500
SMDCHGR0805-27N□	27	2, 5, 10	55	250&500	2500	0.25	500
SMDCHGR0805-33N□	33	2, 5, 10	60	250&500	2050	0.27	500
SMDCHGR0805-39N□	39	2, 5, 10	60	250&500	2000	0.29	500
SMDCHGR0805-47N□	47	2, 5, 10	60	200&500	1650	0.31	500
SMDCHGR0805-56N□	56	2, 5, 10	60	200&500	1550	0.34	500
SMDCHGR0805-68N□	68	2, 5, 10	60	200&500	1450	0.38	500
SMDCHGR0805-82N□	82	2, 5, 10	60	150&500	1300	0.42	400
SMDCHGR0805-R10□	100	2, 5, 10	60	150&500	1200	0.46	400
SMDCHGR0805-R12□	120	2, 5, 10	50	150&250	1100	0.51	400
SMDCHGR0805-R15□	150	2, 5, 10	50	100&250	920	0.56	400
SMDCHGR0805-R18□	180	2, 5, 10	50	100&250	870	0.64	400
SMDCHGR0805-R22□	220	2, 5, 10	50	100&250	850	0.70	400
SMDCHGR0805-R27□	270	2, 5, 10	48	100&250	650	1.10	350
SMDCHGR0805-R33□	330	2, 5, 10	48	100&250	600	1.40	310
SMDCHGR0805-R39□	390	2, 5, 10	48	100&250	560	1.50	290
SMDCHGR0805-R47□	470	2, 5, 10	33	50&100	375	1.76	250
SMDCHGR0805-R56□	560	5, 10, 20	23	25&50	340	1.90	230
SMDCHGR0805-R68□	680	5, 10, 20	23	25&50	188	2.20	190
SMDCHGR0805-R82□	820	5, 10, 20	23	25&50	215	2.35	180
SMDCHGR0805-1R0□	1000	5, 10, 20	20	25&50	200	2.40	170
SMDCHGR0805-1R5□	1500	5, 10, 20	18	7.9&50	170	2.80	160



I SMDCHGR1008 series

Part No.	Inductance L (nH)	Tolerance (±%)	Q Min.	Test Freq. (MHz) L&Q	SRF (MHz) Min.	DCR (Ω) Max.	Rated Current (mA) Max
SMDCHGR1008-10N□	10	2, 5, 10	50	50&500	4100	0.08	1000
SMDCHGR1008-12N□	12	2, 5, 10	50	50&500	3300	0.09	1000
SMDCHGR1008-15N□	15	2, 5, 10	50	50&500	2500	0.15	1000
SMDCHGR1008-18N□	18	2, 5, 10	50	50&350	2500	0.11	1000
SMDCHGR1008-22N□	22	2, 5, 10	55	50&350	2400	0.12	1000
SMDCHGR1008-27N□	27	2, 5, 10	55	50&350	1600	0.13	1000
SMDCHGR1008-33N□	33	2, 5, 10	60	50&350	1600	0.14	1000
SMDCHGR1008-39N□	39	2, 5, 10	60	50&350	1500	0.15	1000
SMDCHGR1008-47N□	47	2, 5, 10	65	50&350	1500	0.16	1000
SMDCHGR1008-56N□	56	2, 5, 10	65	50&350	1300	0.18	1000
SMDCHGR1008-68N□	68	2, 5, 10	65	50&350	1300	0.20	1000
SMDCHGR1008-82N□	82	2, 5, 10	60	50&350	1000	0.22	1000
SMDCHGR1008-R10□	100	2, 5, 10	60	25&350	1000	0.56	650
SMDCHGR1008-R12□	120	2, 5, 10	60	25&350	950	0.63	650
SMDCHGR1008-R15□	150	2, 5, 10	45	25&100	850	0.70	580
SMDCHGR1008-R18□	180	5, 10, 20	45	25&100	750	0.77	620
SMDCHGR1008-R22□	220	2, 5, 10	45	25&100	660	0.84	500
SMDCHGR1008-R27□	270	2, 5, 10	45	25&100	600	0.91	500
SMDCHGR1008-R33□	330	2, 5, 10	45	25&100	570	1.05	450
SMDCHGR1008-R39□	390	2, 5, 10	45	25&100	500	1.12	470
SMDCHGR1008-R47□	470	2, 5, 10	45	25&100	450	1.19	470
SMDCHGR1008-R56□	560	2, 5, 10	45	25&100	415	1.33	400
SMDCHGR1008-R68□	680	2, 5, 10	45	25&100	375	1.47	400
SMDCHGR1008-R82□	820	5, 10, 20	45	25&100	320	1.61	400
SMDCHGR1008-1R0□	1000	2, 5, 10	35	25&50	290	1.75	370
SMDCHGR1008-1R2□	1200	2, 5, 10	35	7.9&50	250	2.00	310
SMDCHGR1008-1R5□	1500	5, 10, 20	28	7.9&50	200	2.30	330
SMDCHGR1008-1R8□	1800	5, 10, 20	28	7.9&50	160	2.60	300
SMDCHGR1008-2R2□	2200	5, 10, 20	25	7.9&50	98	2.80	280
SMDCHGR1008-2R7□	2700	5, 10, 20	22	7.9&25	80	3.20	290
SMDCHGR1008-3R3□	3300	5, 10, 20	22	7.9&25	70	3.40	290
SMDCHGR1008-3R9□	3900	5, 10, 20	20	7.9&25	60	3.60	260
SMDCHGR1008-4R7□	4700	5, 10, 20	18	7.9&25	60	4.00	260
SMDCHGR1008-5R6□	5600	5, 10, 20	20	7.9&7.9	55	6.80	190
SMDCHGR1008-6R8□	6800	5, 10, 20	20	7.9&7.9	50	7.50	180



I SMDCHGR1210 series

Part No.	Inductance L (nH)	Toleranc (±%)	Q Min.	Test (MHz) L&Q	SRF (MHz) Min.	DCR (Ω) Max.	Rated Current (mA) Max
SMDCHGR1210-10N□	10	2, 5, 10	50	50&500	4100	0.08	1000
SMDCHGR1210-12N□	12	2, 5, 10	50	50&500	3300	0.09	1000
SMDCHGR1210-15N□	15	2, 5, 10	50	50&500	2500	0.10	1000
SMDCHGR1210-18N□	18	2, 5, 10	50	50&350	2500	0.11	1000
SMDCHGR1210-22N□	22	2, 5, 10	55	50&350	2000	0.12	1000
SMDCHGR1210-27N□	27	2, 5, 10	55	50&500	1600	0.13	1000
SMDCHGR1210-33N□	33	2, 5, 10	60	50&350	1600	0.14	1000
SMDCHGR1210-39N□	39	2, 5, 10	60	50&350	1500	0.15	1000
SMDCHGR1210-47N□	47	2, 5, 10	65	50&350	1500	0.16	1000
SMDCHGR1210-56N□	56	2, 5, 10	65	50&350	1300	0.18	1000
SMDCHGR1210-68N□	68	2, 5, 10	65	50&350	1300	0.20	1000
SMDCHGR1210-82N□	82	2, 5, 10	60	50&350	1000	0.22	1000
SMDCHGR1210-R10□	100	2, 5, 10	60	25&350	1000	0.24	980
SMDCHGR1210-R12□	120	2, 5, 10	60	25&350	950	0.26	920
SMDCHGR1210-R15□	150	2, 5, 10	45	25&100	850	0.29	870
SMDCHGR1210-R18□	180	2, 5, 10	45	25&100	750	0.31	830
SMDCHGR1210-R22□	220	2, 5, 10	45	25&100	700	0.35	790
SMDCHGR1210-R27□	270	2, 5, 10	45	25&100	600	0.42	730
SMDCHGR1210-R33□	330	2, 5, 10	45	25&100	570	0.49	680
SMDCHGR1210-R39□	390	2, 5, 10	45	25&100	500	0.54	640
SMDCHGR1210-R47□	470	2, 5, 10	45	25&100	450	0.60	610
SMDCHGR1210-R56□	560	5, 10, 20	45	25&100	415	1.00	460
SMDCHGR1210-R68□	680	2, 5, 10	45	25&100	375	1.15	420
SMDCHGR1210-R82□	820	2, 5, 10	45	25&100	350	1.93	350
SMDCHGR1210-1R0□	1000	2, 5, 10	45	25&100	290	2.16	330
SMDCHGR1210-1R2□	1200	2, 5, 10	45	7.9&100	250	2.38	310
SMDCHGR1210-1R5□	1500	2, 5, 10	35	7.9&50	200	2.64	300
SMDCHGR1210-1R8□	1800	2, 5, 10	30	7.9&50	160	2.76	290
SMDCHGR1210-2R2□	2200	2, 5, 10	25	7.9&50	160	2.98	280
SMDCHGR1210-2R7□	2700	2, 5, 10	22	7.9&50	140	3.30	260
SMDCHGR1210-3R3□	3300	5, 10, 20	22	7.9&25	110	3.66	250
SMDCHGR1210-3R9□	3900	5, 10, 20	22	7.9&7.9	100	4.00	240
SMDCHGR1210-4R7□	4700	5, 10, 20	22	7.9&7.9	90	4.30	230

* Due to the limited space, the catalogue shows the typical specifications only. For more specific details (characteristics graph, reliability, and others), kindly invite you to access 3L official website www.3lcoil.com for better known.