

Miniature SMD Chip Open-Type Inductors/ MSC TYPE

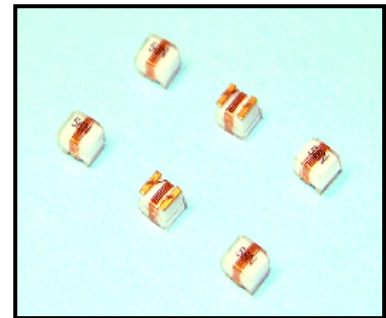
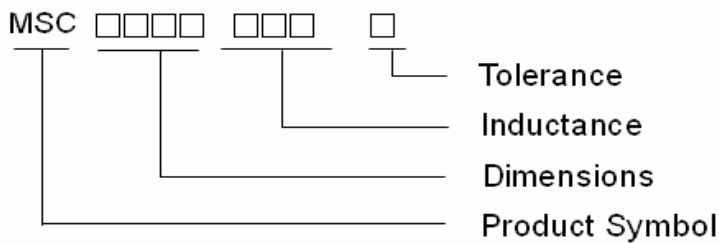
.Features:

- 1.Ceramic body and wire wound construction provide highest SRFs.
- 2.These ultra - compact inductors provided exceptional Q values, even at high frequencies.
- 3.The non-magnetic coil form also assures the utmost in thermal stability, predictability and batch consistency.
- 4.RoHS compliant.

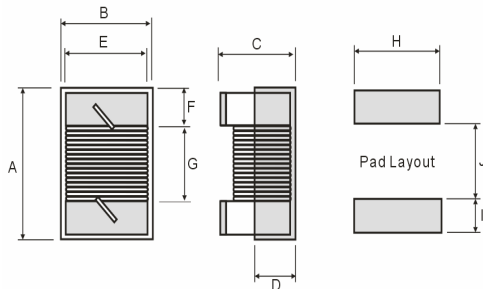
.Applications:

RF products for cellular phone, GPS receiver, Base Station, Repeater, Wireless LAN/Mouse/ Keyboard/earphone, remote control, security system and other RF modules.

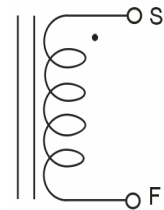
.Product Identification :



.Shape and Dimension



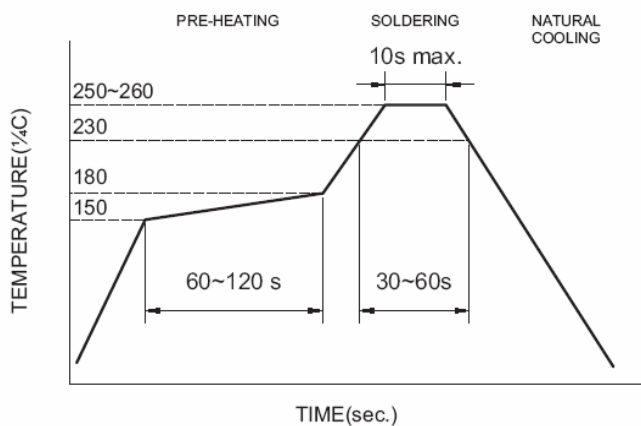
.Schematic



Dimensions in mm

TYPE	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)	J(mm)
MSC0402C	1.19	0.70	0.66	0.25 Ref	0.56	0.23	0.51	0.66	0.36	0.46
MSC0603C	1.80	1.12	1.02	0.35 Ref	0.86	0.33	0.76	1.02	0.64	0.64
MSC0805C	2.29	1.73	1.52	0.50 Ref	1.02	0.44	1.27	1.78	1.02	0.76
MSC1008C	2.92	2.79	2.03	0.70 Ref	1.52	0.51	2.03	2.54	1.02	1.27

.Recommended Reflow



Miniature SMD Chip Open-Type Inductors/ MSC TYPE

Electrical Characteristics (MSC0402C TYPE)

Part No.	Inductance	L/Q Test Freq.	Q	SRF	RDC	Irms	Tolerance	Color Code		
	(nH)	(MHZ)	Min.	(MHZ)Min.	(Ω)Max.	(mA)Max.	(±%)	1st	2nd	3rd
MSC0402C-1N0□	1	250/250	16	12700	0.045	1360	10,5	-	-	-
MSC0402C-1N9□	1.9	250/250	16	11300	0.07	1040	10,5	-	-	-
MSC0402C-2N0□	2	250/250	16	11100	0.07	1040	10,5	-	-	-
MSC0402C-2N2□	2.2	250/250	19	10800	0.07	960	10,5	-	-	-
MSC0402C-2N4□	2.4	250/250	15	10500	0.068	790	10,5	-	-	-
MSC0402C-2N7□	2.7	250/250	16	10400	0.12	640	10,5	-	-	-
MSC0402C-3N3□	3.3	250/250	19	7000	0.066	840	10,5	-	-	-
MSC0402C-3N6□	3.6	250/250	19	6800	0.066	840	10,5	-	-	-
MSC0402C-3N9□	3.9	250/250	19	6000	0.066	840	10,5	-	-	-
MSC0402C-4N3□	4.3	250/250	18	6000	0.091	700	10,5	-	-	-
MSC0402C-4N7□	4.7	250/250	15	4770	0.13	640	10,5	-	-	-
MSC0402C-5N1□	5.1	250/250	20	4800	0.083	800	10,5	-	-	-
MSC0402C-5N6□	5.6	250/250	20	4800	0.083	760	10,5	-	-	-
MSC0402C-6N2□	6.2	250/250	20	4800	0.083	760	10,5	-	-	-
MSC0402C-6N8□	6.8	250/250	20	4800	0.083	680	10,5	-	-	-
MSC0402C-7N5□	7.5	250/250	22	4800	0.1	680	10,5	-	-	-
MSC0402C-8N2□	8.2	250/250	22	4400	0.1	680	10,5	-	-	-
MSC0402C-8N7□	8.7	250/250	18	4100	0.2	480	10,5	-	-	-
MSC0402C-9N0□	9	250/250	22	4160	0.1	680	10,5	-	-	-
MSC0402C-9N1□	9.1	250/250	22	4160	0.1	680	10,5	-	-	-
MSC0402C-9N5□	9.5	250/250	18	4000	0.2	480	10,5	-	-	-
MSC0402C-10N□	10	250/250	21	3900	0.2	480	10,5	-	-	-
MSC0402C-11N□	11	250/250	24	3680	0.12	640	10,5	-	-	-
MSC0402C-12N□	12	250/250	24	3600	0.12	640	10,5	-	-	-
MSC0402C-13N□	13	250/250	24	3450	0.21	440	10,5	-	-	-
MSC0402C-15N□	15	250/250	24	3280	0.17	560	10,5	-	-	-
MSC0402C-16N□	16	250/250	24	3100	0.22	560	10,5	-	-	-
MSC0402C-18N□	18	250/250	25	3100	0.23	420	10,5	-	-	-
MSC0402C-19N□	19	250/250	24	3040	0.2	480	10,5	-	-	-
MSC0402C-20N□	20	250/250	25	3000	0.25	420	10,5	-	-	-
MSC0402C-22N□	22	250/250	25	2800	0.3	400	10,5	-	-	-
MSC0402C-23N□	23	250/250	22	2720	0.3	400	10,5	-	-	-
MSC0402C-24N□	24	250/250	25	2700	0.3	400	10,5	-	-	-
MSC0402C-27N□	27	250/250	24	2480	0.3	400	10,5	-	-	-
MSC0402C-30N□	30	250/250	25	2350	0.3	400	10,5	-	-	-
MSC0402C-33N□	33	250/250	24	2350	0.4	400	10,5	-	-	-
MSC0402C-36N□	36	250/250	24	2320	0.44	320	10,5	-	-	-
MSC0402C-39N□	39	250/250	25	2100	0.55	200	10,5	-	-	-
MSC0402C-40N□	40	250/250	24	2240	0.44	320	10,5	-	-	-

Miniature SMD Chip Open-Type Inductors/ MSC TYPE

Electrical Characteristics (MSC0402C TYPE)

Part No.	Inductance	L/Q Test Freq.	Q	SRF	RDC	Irms	Tolerance	Color Code		
	(nH)	(MHZ)	Min.	(MHZ)Min.	(Ω)Max.	(mA)Max.	($\pm\%$)	1st	2nd	3rd
MSC0402C-43N□	43	250/250	25	2030	0.81	100	10,5	-	-	-
MSC0402C-47N□	47	250/250	20	2100	0.83	150	10,5	-	-	-
MSC0402C-51N□	51	250/250	25	1750	0.82	100	10,5	-	-	-
MSC0402C-56N□	56	250/250	22	1760	0.97	100	10,5	-	-	-
MSC0402C-68N□	68	250/250	22	1620	1.12	100	10,5	-	-	-
MSC0402C-82N□	82	250/250	20	1260	1.55	50	10,5	-	-	-
MSC0402C-R10□	100	250/250	20	1160	2	30	10,5	-	-	-

Electrical Characteristics (MSC0603C TYPE)

Part No.	Inductance	L/Q Test Freq.	Q	SRF	RDC	Irms	Tolerance	Color Code		
	(nH)	(MHZ)	Min.	(MHZ)Min.	(Ω)Max.	(mA)Max.	($\pm\%$)	1st	2nd	3rd
MSC0603C-1N6□	1.6	250/250	24	12500	0.03	700	10,5	RED	-	-
MSC0603C-1N8□	1.8	250/250	16	12500	0.045	700	10,5	BLK	-	-
MSC0603C-2N2□	2.2	250/250	13	12500	0.25	700	10,5	YEL	-	-
MSC0603C-3N3□	3.3	250/250	35	5900	0.045	700	10,5	BLU	-	-
MSC0603C-3N6□	3.6	250/250	22	5900	0.063	700	10,5	RED	-	-
MSC0603C-3N9□	3.9	250/250	22	6900	0.08	700	10,5	BRN	-	-
MSC0603C-4N3□	4.3	250/250	22	5900	0.063	700	10,5	ORN	-	-
MSC0603C-4N7□	4.7	250/250	20	5800	0.116	700	10,5	VIO	-	-
MSC0603C-5N1□	5.1	250/250	20	5700	0.14	700	10,5	GRN	-	-
MSC0603C-5N6□	5.6	250/250	20	5800	0.17	700	10,5	YEL	-	-
MSC0603C-6N3□	6.3	250/250	20	5700	0.14	700	10,5	WHT	-	-
MSC0603C-6N8□	6.8	250/250	27	5800	0.11	700	10,5	RED	-	-
MSC0603C-7N5□	7.5	250/250	28	4800	0.106	700	10,5	BRN	-	-
MSC0603C-8N2□	8.2	250/250	28	4700	0.109	700	10,5	WHT	-	-
MSC0603C-8N7□	8.7	250/250	28	4600	0.109	700	10,5	YEL	-	-
MSC0603C-9N5□	9.5	250/250	28	5400	0.135	700	10,5	BLU	-	-
MSC0603C-10N□	10	250/250	31	4800	0.13	700	10,5,2	ORN	-	-
MSC0603C-11N□	11	250/250	33	4000	0.086	700	10,5,2	GRY	-	-
MSC0603C-12N□	12	250/250	35	4000	0.13	700	10,5,2	YEL	-	-
MSC0603C-15N□	15	250/250	35	4000	0.17	700	10,5,2	GRN	-	-
MSC0603C-16N□	16	250/250	34	3300	0.104	700	10,5,2	WHT	-	-
MSC0603C-18N□	18	250/250	35	3100	0.17	700	10,5,2	BLU	-	-
MSC0603C-22N□	22	250/250	38	3000	0.19	700	10,5,2	VIO	-	-
MSC0603C-24N□	24	250/250	37	2650	0.135	700	10,5,2	BLK	-	-
MSC0603C-27N□	27	250/250	40	2800	0.22	600	10,5,2	GRY	-	-
MSC0603C-30N□	30	250/250	37	2250	0.144	600	10,5,2	BRN	-	-
MSC0603C-33N□	33	250/250	40	2300	0.22	600	10,5,2	WHT	-	-
MSC0603C-36N□	36	250/250	38	2080	0.25	600	10,5,2	RED	-	-
MSC0603C-39N□	39	250/250	40	2200	0.25	600	10,5,2	BLK	-	-

Miniature SMD Chip Open-Type Inductors/ MSC TYPE

Electrical Characteristics (MSC0603C TYPE)

Part No.	Inductance	L/Q Test Freq.	Q	SRF	RDC	Irms	Tolerance	Color Code		
	(nH)	(MHZ)	Min.	(MHZ)Min.	(Ω)Max.	(mA)Max.	(\pm %)	1st	2nd	3rd
MSC0603C-43N□	43	250/250	39	2000	0.28	600	10,5,2	ORN	-	-
MSC0603C-47N□	47	200/200	38	2000	0.28	600	10,5,2	BRN	-	-
MSC0603C-56N□	56	200/200	38	1900	0.31	600	10,5,2	RED	-	-
MSC0603C-68N□	68	200/200	37	1700	0.34	600	10,5,2	ORN	-	-
MSC0603C-72N□	72	150/150	34	1700	0.49	400	10,5,2	YEL	-	-
MSC0603C-82N□	82	150/150	34	1700	0.54	400	10,5,2	GRN	-	-
MSC0603C-R10□	100	150/150	34	1400	0.58	400	10,5,2	BLU	-	-
MSC0603C-R11□	110	150/150	32	1350	0.61	300	10,5,2	VIO	-	-
MSC0603C-R12□	120	150/150	32	1300	0.75	300	10,5,2	GRY	-	-
MSC0603C-R15□	150	150/150	28	990	0.92	280	10,5,2	WHT	-	-
MSC0603C-R16□	160	100/100	25	990	1.25	240	10,5,2	YEL	-	-
MSC0603C-R18□	180	100/100	25	990	1.25	240	10,5,2	BLK	-	-
MSC0603C-R22□	220	100/100	25	900	2.1	200	10,5,2	BRN	-	-
MSC0603C-R27□	270	100/100	24	900	2.8	170	10,5,2	RED	-	-
MSC0603C-R33□	330	100/100	25	900	3.89	100	10,5,2	ORN	-	-
MSC0603C-R39□	390	100/100	25	700	4.35	100	10,5,2	YEL	-	-

Electrical Characteristics (MSC0805C TYPE)

Part No.	Inductance	L/Q Test Freq.	Q	SRF	RDC	Irms	Tolerance	Color Code		
	(nH)	(MHZ)	Min.	(MHZ)Min.	(Ω)Max.	(mA)Max.	(\pm %)	1st	2nd	3rd
MSC0805C-2N8□	2.8	250/1500	80	7900	0.06	800	10,5	GRY	-	-
MSC0805C-3N0□	3	250/1500	65	7900	0.06	800	10,5	WHT	-	-
MSC0805C-3N3□	3.3	250/1500	50	7900	0.08	600	10,5	BLK	-	-
MSC0805C-5N6□	5.6	250/1000	65	5500	0.08	600	10,5	ORN	-	-
MSC0805C-6N8□	6.8	250/1000	50	5500	0.11	600	10,5	BRN	-	-
MSC0805C-7N5□	7.5	250/1000	50	4500	0.14	600	10,5	GRN	-	-
MSC0805C-8N2□	8.2	250/1000	50	4700	0.12	600	10,5	RED	-	-
MSC0805C-10N□	10	250/500	60	4200	0.1	600	10,5,2	BLU	-	-
MSC0805C-12N□	12	250/500	50	4000	0.15	600	10,5,2	ORN	-	-
MSC0805C-15N□	15	250/500	50	3400	0.17	600	10,5,2	YEL	-	-
MSC0805C-18N□	18	250/500	50	3300	0.2	600	10,5,2	GRN	-	-
MSC0805C-22N□	22	250/500	55	2600	0.22	500	10,5,2	BLU	-	-
MSC0805C-24N□	24	250/500	50	2000	0.22	500	10,5,2	GRY	-	-
MSC0805C-27N□	27	250/500	55	2500	0.25	500	10,5,2	VIO	-	-
MSC0805C-33N□	33	250/500	60	2050	0.27	500	10,5,2	GRY	-	-
MSC0805C-36N□	36	250/500	55	1700	0.27	500	10,5,2	ORN	-	-
MSC0805C-39N□	39	250/500	60	2000	0.29	500	10,5,2	WHT	-	-
MSC0805C-43N□	43	200/500	60	1650	0.34	500	10,5,2	YEL	-	-
MSC0805C-47N□	47	200/500	60	1650	0.31	500	10,5,2	BLK	-	-
MSC0805C-56N□	56	200/500	60	1550	0.34	500	10,5,2	BRN	-	-

Miniature SMD Chip Open-Type Inductors/ MSC TYPE

Electrical Characteristics (MSC0805C TYPE)

Part No.	Inductance	L/Q Test Freq.	Q	SRF	RDC	Irms	Tolerance	Color Code		
	(nH)	(MHZ)	Min.	(MHZ)Min.	(Ω)Max.	(mA)Max.	(\pm %)	1st	2nd	3rd
MSC0805C-68N□	68	200/500	60	1450	0.38	500	10,5,2	RED	-	-
MSC0805C-82N□	82	150/500	65	1300	0.42	400	10,5,2	ORN	-	-
MSC0805C-91N□	91	150/500	65	1200	0.48	400	10,5,2	BLK	-	-
MSC0805C-R10□	100	150/500	65	1200	0.46	400	10,5,2	YEL	-	-
MSC0805C-R11□	110	150/250	50	1000	0.48	400	10,5,2	BRN	-	-
MSC0805C-R12□	120	150/250	50	1100	0.51	400	10,5,2	GRN	-	-
MSC0805C-R15□	150	100/250	50	920	0.56	400	10,5,2	BLU	-	-
MSC0805C-R18□	180	100/250	50	870	0.64	400	10,5,2	VIO	-	-
MSC0805C-R20□	200	100/250	50	860	0.68	400	10,5,2	RED	-	-
MSC0805C-R22□	220	100/250	50	850	0.7	400	10,5,2	GRY	-	-
MSC0805C-R24□	240	100/250	44	690	1	350	10,5,2	RED	-	-
MSC0805C-R25□	250	100/250	45	660	1.2	350	10,5,2	YEL	-	-
MSC0805C-R27□	270	100/250	48	650	1	350	10,5,2	WHT	-	-
MSC0805C-R33□	330	100/250	48	600	1.4	310	10,5,2	BLK	-	-
MSC0805C-R39□	390	100/250	48	560	1.5	290	10,5,2	BRN	-	-
MSC0805C-R47□	470	50/100	33	375	1.76	250	10,5,2	VIO	-	-
MSC0805C-R56□	560	25/50	23	340	1.9	230	10,5,2	ORN	-	-
MSC0805C-R62□	620	25/50	23	220	2.2	210	10,5,2	WHT	-	-
MSC0805C-R68□	680	25/50	23	188	2.2	190	10,5,2	GRN	-	-
MSC0805C-R82□	820	25/50	23	215	2.35	180	10,5,2	BLU	-	-
MSC0805C-1R0□	1000	25/50	20	100	2.5	170	10,5,2	VIO	-	-

Electrical Characteristics (MSC1008C TYPE)

Part No.	Inductance	L/Q Test Freq.	Q	SRF	RDC	Irms	Tolerance	Color Code		
	(nH)	(MHZ)	Min.	(MHZ)Min.	(Ω)Max.	(mA)Max.	(\pm %)	1st	2nd	3rd
MSC1008C-10N□	10	50/500	50	4100	0.08	1000	10,5,2	BRN	BLK	BLK
MSC1008C-12N□	12	50/500	50	3300	0.09	1000	10,5,2	BRN	RED	BLK
MSC1008C-15N□	15	50/500	50	2500	0.1	1000	10,5,2	BRN	GRN	BLK
MSC1008C-18N□	18	50/350	50	2500	0.11	1000	10,5,2	BRN	GRY	BLK
MSC1008C-22N□	22	50/350	55	2400	0.12	1000	10,5,2	RED	RED	BLK
MSC1008C-27N□	27	50/350	55	1600	0.13	1000	10,5,2	RED	VIO	BLK
MSC1008C-33N□	33	50/350	60	1600	0.14	1000	10,5,2	ORN	ORN	BLK
MSC1008C-39N□	39	50/350	60	1500	0.15	1000	10,5,2	ORN	WHT	BLK
MSC1008C-47N□	47	50/350	65	1500	0.16	1000	10,5,2	YEL	VIO	BLK
MSC1008C-56N□	56	50/350	65	1300	0.18	1000	10,5,2	GRN	BLU	BLK
MSC1008C-68N□	68	50/350	65	1300	0.2	1000	10,5,2	BLU	GRY	BLK
MSC1008C-82N□	82	50/350	60	1000	0.22	1000	10,5,2	GRY	RED	BLK
MSC1008C-R10□	100	25/350	60	1000	0.56	650	10,5,2	BRN	BLK	BRN
MSC1008C-R12□	120	25/350	60	950	0.63	650	10,5,2	BRN	RED	BRN
MSC1008C-R15□	150	25/100	45	850	0.7	580	10,5,2	BRN	GRN	BRN

Miniature SMD Chip Open-Type Inductors/ MSC TYPE

Electrical Characteristics (MSC1008C TYPE)

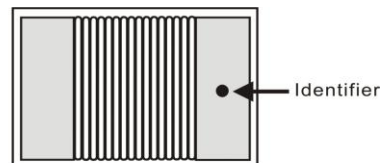
Part No.	Inductance	L/Q Test Freq.	Q	SRF	RDC	Irms	Tolerance	Color Code		
	(nH)	(MHZ)	Min.	(MHZ)Min.	(Ω)Max.	(mA)Max.	(±%)	1st	2nd	3rd
MSC1008C-R18□	180	25/100	45	750	0.77	620	10,5,2	BRN	GRY	BRN
MSC1008C-R22□	220	25/100	45	700	0.84	500	10,5,2	RED	RED	BRN
MSC1008C-R27□	270	25/100	45	600	0.91	500	10,5,2	RED	VIO	BRN
MSC1008C-R33□	330	25/100	45	570	1.05	450	10,5,2	ORN	ORN	BRN
MSC1008C-R39□	390	25/100	45	500	1.12	470	10,5,2	ORN	WHT	BRN
MSC1008C-R47□	470	25/100	45	450	1.19	470	10,5,2	YEL	VIO	BRN
MSC1008C-R56□	560	25/100	45	415	1.33	400	10,5,2	GRN	BLU	BRN
MSC1008C-R62□	620	25/100	45	375	1.4	300	10,5,2	BLU	RED	BRN
MSC1008C-R68□	680	25/100	45	375	1.47	400	10,5,2	BLU	GRY	BRN
MSC1008C-R75□	750	25/100	45	360	1.54	360	10,5,2	VIO	GRN	BRN
MSC1008C-R82□	820	25/100	45	350	1.61	400	10,5,2	GRY	RED	BRN
MSC1008C-R91□	910	25/50	35	320	1.68	380	10,5,2	WHT	BRN	BRN
MSC1008C-1R0□	1000	25/50	35	290	1.75	370	10,5,2	BRN	BLK	RED
MSC1008C-1R2□	1200	7.9/50	35	250	2	310	10,5,2	BRN	RED	RED
MSC1008C-1R5□	1500	7.9/50	28	200	2.3	330	10,5,2	BRN	GRN	RED
MSC1008C-1R8□	1800	7.9/50	28	160	2.6	300	10,5,2	BRN	GRY	RED
MSC1008C-2R2□	2200	7.9/50	28	160	2.8	280	10,5,2	RED	RED	RED
MSC1008C-2R7□	2700	7.9/25	22	140	3.2	290	10,5,2	RED	VIO	RED
MSC1008C-3R3□	3300	7.9/25	22	110	3.4	290	10,5,2	ORN	ORN	RED
MSC1008C-3R9□	3900	7.9/25	20	100	3.6	260	10,5,2	ORN	WHT	RED
MSC1008C-4R7□	4700	7.9/25	20	90	4	260	10,5,2	YEL	VIO	RED
MSC1008C-5R6□	5600	7.9/7.9	18	45	4	240	10,5,2	GRN	BLU	RED
MSC1008C-6R8□	6800	7.9/7.9	18	40	4.9	200	10,5,2	BLU	GRY	RED
MSC1008C-8R2□	8200	7.9/7.9	18	25	6	170	10,5,2	GRY	RED	RED
MSC1008C-100□	10000	2.52/7.9	18	25	8	150	10,5,2	BRN	BLK	ORN
MSC1008C-150□	15000	2.52/7.9	15	20	11	100	10,5,2	BRN	GRN	ORN

NOTE:

1. Operating temperature range – 40°C ~ 125°C
2. Irms for 15°C rise above 25°C ambient.
3. □ Tolerance : G=±2% ; J=±5% ; K=±10% ; M=±20%
4. Color Coding System

0603/0805/201614 Series

Because of their small size, these parts are marked with a single color dot. The inductance value represented by the dot is shown on the data page for each series.

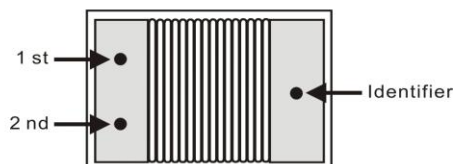


1008/1206/252018/322522 Series

These parts are marked with 3 color dots. The table at right side shows the significance of each color. Dots 1 and 2 indicate the inductance in nanohenries. Dot 3 indicates the number of zeroes to be added.

- | | |
|------------|------------|
| 0 = Black | 5 = Green |
| 1 = Brown | 6 = Blue |
| 2 = Red | 7 = Violet |
| 3 = Orange | 8 = Gray |
| 4 = Yellow | 9 = White |

Examples:
 Yellow, Violet, Black = 47nH
 Yellow, Violet, Brown = 470nH
 Yellow, Violet, Red = 4700nH
 Brown, Black, Red = 1000nH



Miniature SMD Chip Open-Type Inductors/ MSC TYPE

Reliability and Test Conditions(可靠性測試條件)

1-1.Environmental Performance

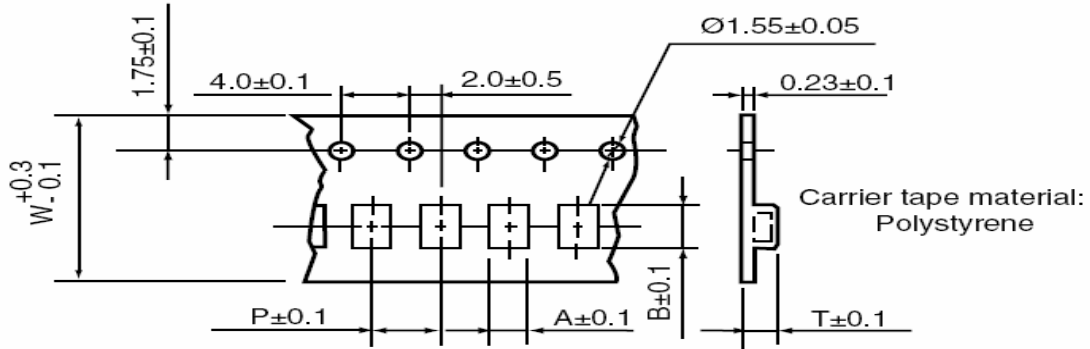
Item	Specification	Test Method															
Temperature Cycle	Appearance: No Damage Inductance: within $\pm 10\%$ of initial value Q change: within $\pm 30\%$ of initial value	One cycle: <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature ($^{\circ}\text{C}$)</th> <th>Time (min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-25 ± 3</td> <td>30</td> </tr> <tr> <td>2</td> <td>25 ± 2</td> <td>15</td> </tr> <tr> <td>3</td> <td>85 ± 3</td> <td>30</td> </tr> <tr> <td>4</td> <td>25 ± 2</td> <td>15</td> </tr> </tbody> </table> Total: 5 cycles Measured After Exposure in The Room Condition For 1hrs	Step	Temperature ($^{\circ}\text{C}$)	Time (min)	1	-25 ± 3	30	2	25 ± 2	15	3	85 ± 3	30	4	25 ± 2	15
Step	Temperature ($^{\circ}\text{C}$)	Time (min)															
1	-25 ± 3	30															
2	25 ± 2	15															
3	85 ± 3	30															
4	25 ± 2	15															
Humidity Resistance		Temperature: $40\pm 2^{\circ}\text{C}$ Relative Humidity: 90 ~ 95% Time: 100hrs Measured After Exposure In The Room Condition For 1hrs															
High Temperature Resistance		Temperature: $125\pm 3^{\circ}\text{C}$ Time: 50Hrs Measured After Exposure In The Room Condition For 1Hrs															
Low Temperature Resistance		Temperature: $-40\pm 3^{\circ}\text{C}$ Time: 50Hrs Measured After Exposure In The Room Condition For 1Hrs															
High Temperature Load Life	There should be no evidence of short or open circle	Temperature: $85\pm 3^{\circ}\text{C}$ Load: Allowed DC Current Time: 1000Hrs															
Humidity Load Life		Temperature: $40\pm 2^{\circ}\text{C}$ Relative Humidity: 90~95% Load: Allowed DC Current Time: 1000Hrs															

1-2.Mechanical Performance

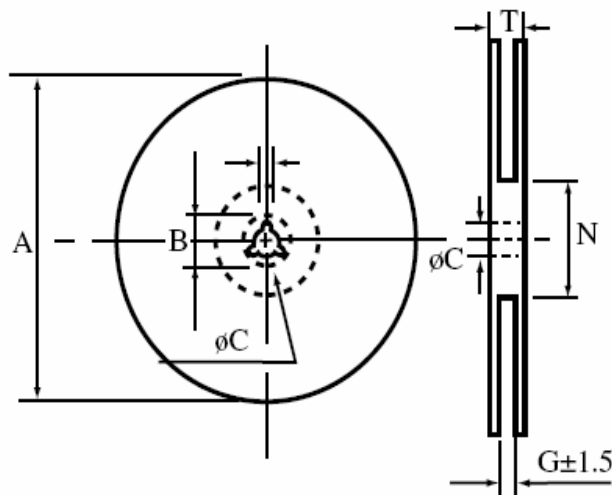
Item	Specification	Test Method
Vibration Test (Low Frequency)	1.Appearance: No Damage 2.Inductance: within $\pm 10\%$ of initial value 3.Q change: within $\pm 30\%$ of initial value	1. Test device shall be soldered on the substrate. 2. Oscillation frequency: 10 to 55 to 10Hz for 1min. 3. Amplitude: 1.5mm 4. Time: 2hrs for each axis(X, Y & Z),total 6hrs
Resistance TO Soldering Heat	Apperance: No Damage	1. The device should be reflow soldered on PCB (peak $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 10 seconds) 2. Solder Composition: Sn/Ag3.0/Cu0.5 3. Test time: 6 minutes
Solder ability	The Electrodes Shall Be At Least 90% Covered With New Solder Coating	1. Pre-Heating: 150°C , 1min. 2. Solder Composition: Sn/Ag3.0/Cu0.5 3. Solder Temperature: $245\pm 5^{\circ}\text{C}$. 4. Immersion Time: 4 ± 1 sec.
Component Adhesion (Push Test)	1 Lbs. For 0402 2 Lbs. For 0603 4 Lbs. For The Rest	The device should be reflow soldered ($245\pm 5^{\circ}\text{C}$ For 10 seconds) to a tinned copper substrate. A force gauge should be applied to the side of the component. The device must withstand a minimum force of 2 or 4 pounds without a failure of the termination attached to component

Miniature SMD Chip Open-Type Inductors/ MSC TYPE

4 .Packing Specifications



TYPE	Packaging Quantity		Tape Dimension				
	Pcs / Reel	Inner box	A	B	W	P	T
MSC0402C	4000	20000	0.70	1.20	8	4	0.62
MSC0603C	4000	20000	1.15	1.83	8	4	0.95
MSC0805C	2000	10000	1.85	2.45	8	4	1.45
MSC1008C	2000	10000	2.80	2.95	8	4	2.20



TYPE	Reel Dimension					
	A	B	C	G	N	T
<input checked="" type="checkbox"/> 8mm	178 ± 2	21.0 ± 0.8	13.0 ± 0.8	10.00	60	12
12mm	178 ± 2	21.0 ± 0.8	13.0 ± 0.8	14.00	60	16.5