

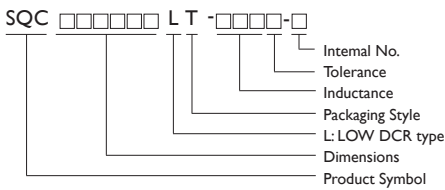
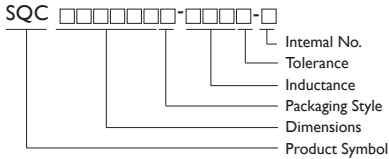
Miniature Surface Mount Chip Inductors

SQC Series

High Current and Low DC Resistance



PRODUCT IDENTIFICATION



- Packaging : T: Tape and Reel
- Tolerance : J = ±5%; K = ±10%; M = ±20%
- SQC_LT : Low DCR Type

Note : SQC Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2006 and internal No. will be change to "N" as identification. EX. SQC321618T-R12□-N

APPLICATIONS

Personal Computers

Disk Drives and Computer Peripherals

Pagers, Cordless Phone

DC Power Supply Circuits

Note : SQC Series is not suitable for wave soldering

FEATURES

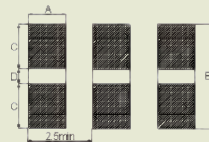
Low DC resistance, high current capacity, and high impedance characteristics.

Excellent solder heat resistance. Both flow and reflow soldering methods can be employed

Available in 4 sizes.

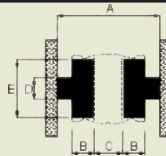
RECOMMENDED PATTERN

SQC321618



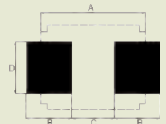
A	B	C	D
1.5	4.5	1.75	1.0

SQC322520 & 453226



TYPE	A	B	C	D	E
SQC322520	5.5	1.0	1.3	1.0	2.0
SQC423556	7.5	1.5	1.5	1.5	3.0

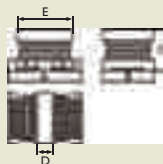
SQC575047



A	B	C	D
8.0	3.0	2.0	3.5

SHAPES AND DIMENSIONS

Dimensions : mm



TYPE	A	B	C	D	E
SQC321618	3.2 ± 0.3	1.6 ± 0.2	1.8 ± 0.2	0.7Min.	2.3±0.2
SQC322520	3.2 ± 0.3	2.5 ± 0.2	2.0 ± 0.2	1.3TYP.	2.5±0.2
SQC453226	4.5 ± 0.3	3.2 ± 0.2	2.6 ± 0.2	1.0Min.	3.6±0.2
SQC575047	5.7 ± 0.3	5.0 ± 0.3	4.7 ± 0.3	1.7Min.	5.0±0.3



ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (μ H)	TOLERANCE (%)	TEST FREQUENCY (MHz)	SRF (MHz) Min.	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
SQC321618T-R12 □ -S	0.12	20	I	250	0.112	970
SQC321618T-R22 □ -S	0.22	20	I	250	0.140	850
SQC321618T-R47 □ -S	0.47	20	I	180	0.210	700
SQC321618T-1R0 □ -S	1.0	20	I	100	0.364	510
SQC321618T-2R2 □ -S	2.2	20	I	50	0.533	430
SQC321618T-4R7 □ -S	4.7	10/20	I	31	0.845	340
SQC321618T-100 □ -S	10	5/10	I	20	1.690	230
SQC321618T-220 □ -S	22	5/10	I	14	3.900	160
SQC321618T-470 □ -S	47	5/10	I	10	10.40	100
SQC321618T-101 □ -S	100	5/10	I	7	15.60	80

- Rated Current : Self temperature rise shall be limited to 35°C Max. Inductance drop 10% typ.
- Operating temp : -25°C~85°C
- Soldering Heat : 230°C 10 sec after 150°C preheat cycle for 4 min.
- Test Equipment : L : HP4192A. LF Impedance Analyzer
SRF : HP4291A RF Impedance Analyzer
DCR : CHEN HWA 502 BC

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (μ H)	TOLERANCE (%)	TEST FREQUENCY (MHz)	SRF (MHz) Min.	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
SQC322520T-1R0 □ -S	1.0	20	I	96	0.09	1000
SQC322520T-2R2 □ -S	2.2	20	I	64	0.13	600
SQC322520T-4R7 □ -S	4.7	20	I	43	0.20	450
SQC322520T-100 □ -S	10	20	I	26	0.44	300
SQC322520T-220 □ -S	22	10/20	I	19	0.71	250
SQC322520T-470 □ -S	47	10/20	I	15	1.30	170
SQC322520T-101 □ -S	100	10/20	I	10	3.50	100
SQC322520T-221 □ -S	220	10/20	I	6.8	8.40	70
SQC322520T-331 □ -S	330	10/20	I	5.6	10.0	60
SQC322520T-391 □ -S	390	10/20	I	5.0	17.0	60
SQC322520T-471 □ -S	470	10/20	0.001	5.0	19.0	60
SQC322520T-561 □ -S	560	10/20	0.001	5.0	22.0	60

- Rated Current : Self temperature rise shall be limited to 35°C Max. Inductance drop 10% typ.
- Operating temp : -25°C~85°C
- Soldering Heat : 230°C 10 sec after 150°C preheat cycle for 4 min.
- Inductance tolerance : J=±5% K=±10% M=±20%
- Test Equipment : L : HP4192A. LF Impedance Analyzer
SRF : HP4291A RF Impedance Analyzer
DCR : CHEN HWA 502 BC



ELECTRICAL CHARACTERISTICS (LOW DCR TYPE)

PART NO.	INDUCTANCE (μ H)	TOLERANCE (%)	TEST FREQUENCY (MHz)	DC RESISTANCE (Ω) Max.	SRF (MHz) Min.	RATED CURRENT (mA) Max.
SQC322520LT-R15 <input type="checkbox"/> -S	0.15	20	1	0.028	400	1450
SQC322520LT-R27 <input type="checkbox"/> -S	0.27	20	1	0.034	250	1250
SQC322520LT-R47 <input type="checkbox"/> -S	0.47	20	1	0.042	150	1100
SQC322520LT-1R0 <input type="checkbox"/> -S	1.0	20	1	0.060	100	1000
SQC322520LT-2R2 <input type="checkbox"/> -S	2.2	20	1	0.097	64	790
SQC322520LT-4R7 <input type="checkbox"/> -S	4.7	20	1	0.15	43	650
SQC322520LT-100 <input type="checkbox"/> -S	10	10/20	1	0.30	26	450

- Rated Current : Self temperature rise shall be limited to 35°C Max. Inductance drop 10% typ.
- Operating temp : -25°C~85°C
- Soldering Heat : 230°C 10 sec after 150°C preheat cycle for 4 min.
- Test Equipment : L : HP4192A. LF Impedance Analyzer
SRF : HP4292A LF Impedance Analyzer
DCR : CHEN HWA 502 BC

ELECTRICAL CHARACTERISTICS : LEAD FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (μ H)	TEST FREQUENCY (MHz)	SRF (MHz) Min.	DC RESISTANCE (Ω) Max.	RATED CURRENT (A) Max.	TOLERANCE
SQC321618T-R12 <input type="checkbox"/> -N	0.12	1V 1MHz	250	0.112+0	0.97	M
SQC321618T-R22 <input type="checkbox"/> -N	0.22	1V 1MHz	250	0.140+0	0.85	M
SQC321618T-R47 <input type="checkbox"/> -N	0.47	1V 1MHz	180	0.210+0	0.7	M
SQC321618T-1R0 <input type="checkbox"/> -N	1	1V 1MHz	100	0.364+0	0.51	M
SQC321618T-2R2 <input type="checkbox"/> -N	2.2	1V 1MHz	50	0.533+0	0.43	K,M
SQC321618T-4R7 <input type="checkbox"/> -N	4.7	1V 1MHz	31	0.845+0	0.34	J,K,M
SQC321618T-100 <input type="checkbox"/> -N	10	1V 1MHz	20	1.69+0	0.23	J,K,M
SQC321618T-220 <input type="checkbox"/> -N	22	1V 1MHz	14	3.90+0	0.16	J,K,M
SQC321618T-470 <input type="checkbox"/> -N	47	1V 1MHz	10	10.4+0	0.1	J,K,M
SQC321618T-101 <input type="checkbox"/> -N	100	1V 1MHz	7	15.6+0	0.08	J,K,M
SQC322520T-1R0 <input type="checkbox"/> -N	1	0.1V 1MHz	96	0.09 \pm 30%	1	M
SQC322520T-2R2 <input type="checkbox"/> -N	2.2	0.1V 1MHz	64	0.13 \pm 30%	0.6	M
SQC322520T-3R3 <input type="checkbox"/> -N	3.3	0.1V 1MHz	60	0.15 \pm 30%	0.6	K,M
SQC322520T-3R9 <input type="checkbox"/> -N	3.9	0.1V 1MHz	50	0.16 \pm 30%	0.5	M
SQC322520T-4R7 <input type="checkbox"/> -N	4.7	0.1V 1MHz	43	0.20 \pm 30%	0.45	M
SQC322520T-6R8 <input type="checkbox"/> -N	6.8	0.1V 1MHz	30	0.26 \pm 30%	0.4	M
SQC322520T-100 <input type="checkbox"/> -N	10	0.1V 1MHz	26	0.44 \pm 30%	0.3	K,M
SQC322520T-220 <input type="checkbox"/> -N	22	0.1V 1MHz	19	0.71 \pm 30%	0.25	K,M
SQC322520T-330 <input type="checkbox"/> -N	33	0.1V 1MHz	15	1.1 \pm 30%	0.2	K,M
SQC322520T-470 <input type="checkbox"/> -N	47	0.1V 1MHz	15	1.30 \pm 30%	0.17	K,M
SQC322520T-560 <input type="checkbox"/> -N	56	0.1V 1MHz	12	2.30 \pm 30%	0.15	K,M
SQC322520T-101 <input type="checkbox"/> -N	100	0.1V 1MHz	10	3.50 \pm 30%	0.1	K,M
SQC322520T-221 <input type="checkbox"/> -N	220	0.1V 1MHz	6.8	8.40 \pm 30%	0.07	K,M
SQC322520T-331 <input type="checkbox"/> -N	330	0.1V 1MHz	5.6	10 \pm 30%	0.06	K,M
SQC322520T-391 <input type="checkbox"/> -N	390	0.1V 1MHz	5	17 \pm 30%	0.06	K,M
SQC322520T-471 <input type="checkbox"/> -N	470	0.1V 1KHz	5	19 \pm 30%	0.06	K,M
SQC322520T-561 <input type="checkbox"/> -N	560	0.1V 1KHz	5	22 \pm 30%	0.06	K,M

NOTE : -tolerance J \pm 5% / K= \pm 10% / M= \pm 20%

1. Operating temperature range -25°C~85°C

2. Rated Current : Self temperature rise shall be limited to 35°C Max. Inductance drop 10% typ.

“-N” FOR COMPLETELY LEAD TYPE (INCLUDING FERRITE BODY & SOLDER)



ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (μ H)	TOLERANCE (%)	TEST FREQUENCY (MHz)	SRF (MHz) Min.	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
SQC453226T-1R0 □ -S	1.0	20	1	100	0.08	1080
SQC453226T-1R5 □ -S	1.5	20	1	85	0.09	1000
SQC453226T-2R2 □ -S	2.2	20	1	60	0.11	900
SQC453226T-3R3 □ -S	3.3	20	1	47	0.13	800
SQC453226T-4R7 □ -S	4.7	10/20	1	35	0.15	750
SQC453226T-6R8 □ -S	6.8	10/20	1	30	0.20	720
SQC453226T-100 □ -S	10	5/10	1	23	0.24	650
SQC453226T-150 □ -S	15	5/10	1	20	0.32	570
SQC453226T-220 □ -S	22	5/10	1	15	0.60	420
SQC453226T-330 □ -S	33	5/10	1	12	1.0	310
SQC453226T-470 □ -S	47	5/10	1	10	1.1	280
SQC453226T-680 □ -S	68	5/10	1	8.4	1.7	220
SQC453226T-101 □ -S	100	5/10	1	6.8	2.2	190
SQC453226T-151 □ -S	150	5/10	1	5.5	3.5	130
SQC453226T-221 □ -S	220	5/10	1	4.5	4.0	110
SQC453226T-331 □ -S	330	5/10	1	3.6	6.8	100
SQC453226T-471 □ -S	470	5/10	0.001	3.0	8.5	90

- Rated Current : Self temperature rise shall be limited to 35°C Max. Inductance drop 10% typ.
- Operating temp : -25°C~85°C
- Soldering Heat : 230°C 10 sec after 150°C preheat cycle for 4 min.
- Test Equipment : L : HP4192A. LF Impedance Analyzer
SRF : HP4291A RF Impedance Analyzer
DCR : CHEN HWA 502 BC

ELECTRICAL CHARACTERISTICS : LEAD FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (μ H)	TEST FREQUENCY (MHz)	SRF (MHz) Min.	DC resistance (Ω) Max.	RATED Current (A) Max.	TOLERANCE
SQC453226T-1R0 □ -N	1	1V 1MHz	100	0.08+0	1.08	M
SQC453226T-1R5 □ -N	1.5	1V 1MHz	85	0.09+0	1	M
SQC453226T-2R2 □ -N	2.2	1V 1MHz	60	0.11+0	0.9	M
SQC453226T-3R3 □ -N	3.3	1V 1MHz	47	0.13+0	0.8	M
SQC453226T-4R7 □ -N	4.7	1V 1MHz	35	0.15+0	0.75	K,M
SQC453226T-6R8 □ -N	6.8	1V 1MHz	30	0.20+0	0.75	K,M
SQC453226T-100 □ -N	10	1V 1MHz	23	0.24+0	0.65	J,K,M
SQC453226T-150 □ -N	15	1V 1MHz	20	0.32+0	0.57	J,K,M
SQC453226T-220 □ -N	22	1V 1MHz	15	0.60+0	0.42	J,K,M
SQC453226T-330 □ -N	33	1V 1MHz	12	1.00+0	0.31	J,K,M
SQC453226T-470 □ -N	47	1V 1MHz	10	1.10+0	0.28	J,K,M
SQC453226T-680 □ -N	68	1V 1MHz	8.4	1.70+0	0.22	J,K,M
SQC453226T-101 □ -N	100	1V 1MHz	6.8	2.20+0	0.19	J,K,M
SQC453226T-151 □ -N	150	1V 1MHz	5.5	3.50+0	0.13	J,K,M
SQC453226T-221 □ -N	220	1V 1MHz	4.5	4.00+0	0.11	J,K,M
SQC453226T-331 □ -N	330	1V 1MHz	3.6	6.80+0	0.1	J,K,M
SQC453226T-471 □ -N	470	1V 1MHz	3	8.50+0	0.09	J,K,M

NOTE : □ -tolerance J \pm 5% / K= \pm 10% / M= \pm 20%

1. Operating temperature range -25°C~85°C

2. Rated Current : Self temperature rise shall be limited to 35°C Max. Inductance drop 10% typ.

“-N” FOR COMPLETELY LEAD FREE TYPE (INCLUDING FERRITE BODY & SOLDER)



ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE (μ H)	TOLERANCE (\pm %)	TEST FREQUENCY	DC RESISTANCE (Ω) Max.	SRF (MHz) Min.	Rated Current (mA) Max.
SQC575047T-R12□-S	0.12	20	1MHz	0.0098	450	6000
SQC575047T-R27□-S	0.27	20	1MHz	0.0140	300	5300
SQC575047T-R47□-S	0.47	20	1MHz	0.0182	200	4800
SQC575047T-1R0□-S	1.0	20	1MHz	0.0270	150	4000
SQC575047T-1R5□-S	1.5	20	1MHz	0.0310	110	3700
SQC575047T-2R2□-S	2.2	20	1MHz	0.0410	80	3200
SQC575047T-3R3□-S	3.3	20	1MHz	0.0500	40	2900
SQC575047T-4R7□-S	4.7	20	1MHz	0.0574	30	2700
SQC575047T-6R8□-S	6.8	20	1MHz	0.1040	25	2000
SQC575047T-100□-S	10	10/20	1MHz	0.1300	20	1700
SQC575047T-150□-S	15	10/20	1MHz	0.210	17	1400
SQC575047T-220□-S	22	10/20	1MHz	0.266	15	1200
SQC575047T-330□-S	33	10/20	1MHz	0.448	12	900
SQC575047T-470□-S	47	10/20	1MHz	0.560	10	800
SQC575047T-680□-S	68	10/20	100kHz	0.938	7.6	640
SQC575047T-101□-S	100	10/20	100kHz	1.204	6.5	560
SQC575047T-151□-S	150	10/20	100kHz	2.660	5.0	420
SQC575047T-221□-S	220	10/20	100kHz	3.360	4.0	320
SQC575047T-331□-S	330	10/20	100kHz	6.160	3.1	270
SQC575047T-471□-S	470	10/20	100kHz	7.560	2.4	240
SQC575047T-681□-S	680	10/20	100kHz	11.34	1.9	190
SQC575047T-102□-S	1000	10/20	10kHz	14.42	1.7	150
SQC575047T-222□-S	2200	10/20	10kHz	30.10	1.2	100
SQC575047T-472□-S	4700	10/20	10kHz	61.04	0.8	70
SQC575047T-103□-S	10000	10/20	10kHz	140.0	0.5	50

- Inductance Range 0.12 μ H to 10000 μ H.
- Rated Current : Self temperature rise shall be limited to 35°C Max. Inductance drop 10% typ.
- Operating temp : -25°C~85°C
- Soldering Heat : 230°C 10 sec after 150°C preheat cycle for 4 min.
- Inductance tolerance : J=±5% K=±10% M=±20%
- Test Equipment : L : HP4192A. LF Impedance Analyzer
SRF : HP4291A RF Impedance Analyzer
DCR : CHEN HWA 502 BC



ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (μ H)	TEST FREQ	SRF (MHz) Min.	RDC (Ω) Max.	Rated Current (mA) Max.	TOLERANCE
SQC575047T-R12 <input type="checkbox"/> -N	0.12	IV 1MHz	450	0.0980	6000	M
SQC575047T-R27 <input type="checkbox"/> -N	0.27	IV 1MHz	300	0.0140	5300	M
SQC575047T-R47 <input type="checkbox"/> -N	0.47	IV 1MHz	200	0.0182	4800	M
SQC575047T-1R0 <input type="checkbox"/> -N	1.00	IV 1MHz	150	0.0270	4000	M
SQC575047T-1R5 <input type="checkbox"/> -N	1.5	IV 1MHz	110	0.0310	3700	M
SQC575047T-2R2 <input type="checkbox"/> -N	2.2	IV 1MHz	80	0.0410	3200	M
SQC575047T-3R3 <input type="checkbox"/> -N	3.3	IV 1MHz	40	0.0500	2900	M
SQC575047T-4R7 <input type="checkbox"/> -N	4.7	IV 1MHz	30	0.0574	2700	M
SQC575047T-6R8 <input type="checkbox"/> -N	6.8	IV 1MHz	25	0.1040	2000	M
SQC575047T-100 <input type="checkbox"/> -N	10	IV 1MHz	20	0.1300	1700	K,M
SQC575047T-150 <input type="checkbox"/> -N	15	IV 1MHz	17	0.210	1400	K,M
SQC575047T-220 <input type="checkbox"/> -N	22	IV 1MHz	15	0.266	1200	K,M
SQC575047T-330 <input type="checkbox"/> -N	33	IV 1MHz	12	0.448	900	K,M
SQC575047T-470 <input type="checkbox"/> -N	47	IV 1MHz	10	0.560	800	K,M
SQC575047T-680 <input type="checkbox"/> -N	68	IV 1MHz	7.6	0.938	640	K,M
SQC575047T-101 <input type="checkbox"/> -N	100	IV 100KHz	6.5	1.204	560	K,M
SQC575047T-151 <input type="checkbox"/> -N	150	IV 100KHz	5	2.660	420	K,M
SQC575047T-221 <input type="checkbox"/> -N	220	IV 100KHz	4	3.360	320	K,M
SQC575047T-331 <input type="checkbox"/> -N	330	IV 100KHz	3.1	6.160	270	K,M
SQC575047T-471 <input type="checkbox"/> -N	470	IV 100KHz	2.4	7.560	240	K,M
SQC575047T-681 <input type="checkbox"/> -N	680	IV 100KHz	1.9	11.34	190	K,M
SQC575047T-102 <input type="checkbox"/> -N	1000	IV 10KHz	1.7	14.42	150	K,M
SQC575047T-222 <input type="checkbox"/> -N	2200	IV 10KHz	1.2	30.10	100	K,M
SQC575047T-472 <input type="checkbox"/> -N	4700	IV 10KHz	0.8	61.04	70	K,M
SQC575047T-103 <input type="checkbox"/> -N	10000	IV 10KHz	0.5	140.0	50	K,M

NOTE: -tolerance K= \pm 10% / M= \pm 20%

1. Operating temperature range -25°C~85°C

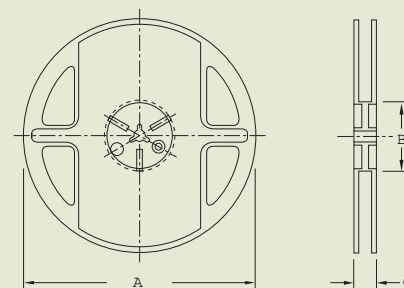
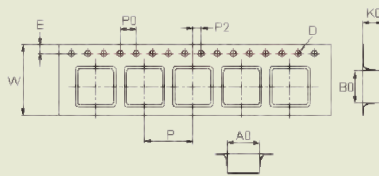
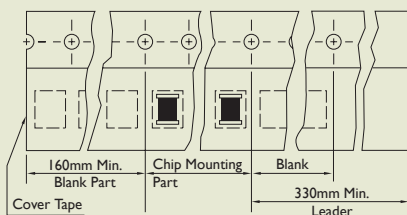
2. Rated Current: Self temperature rise shall be limited to 20°C Max. Inductance drop 10% typ. at last

"-N" FOR COMPLETELY LEAD FREE TYPE (INCLUDING FERRITE BODY & SOLDER)

TAPE MATERIAL

Carrier Tape : Polystyrene

Cover Type : Polyethylene



REEL DIMENSIONS

Dimensions : mm

TYPE	TAPE DIMENSIONS				REEL DIMENSIONS						QUANTITY			
	A0	B0	K0	D	E	W	P	P0	P2	A	B	C	D	/REEL
SQC321618	1.88	3.53	2.10	1.5	1.75	8	4	4	2	178	60	9	1.5	2000
SQC322520	2.90	3.60	2.25	1.5	1.75	8	4	4	2	178	60	9	1.5	2000
SQC453226	3.60	4.90	3.00	1.5	1.75	12	8	4	2	178	60	13.2	1.5	500
SQC575047	5.4	6.0	5.5	1.5	1.75	16	12	12	2	330	100	17	1.5	1000