

SQC Series

SMD Wire Wound Chip Inductors

APPLICATIONS

Personal Computers
Disk Drives and Computer Peripherals
Pagers, Cordless Phones
DC Power Supply Circuits

OUTLINE

These miniature chip inductors, SQC Series, wound on a special ferrite core and are excellent to be used as choke coil in DC power supply circuits.

FEATURES

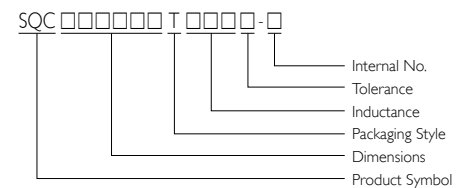
Low DC resistance, high current capacity, and high impedance characteristics.
Excellent solder heat resistance. Both flow and reflow soldering methods can be employed.

SHAPES AND DIMENSIONS

TYPE	A	B	C	E	F	G
SQC201609	2.0 ± 0.2	1.6 ± 0.2	0.95 ± 0.05	1.0	0.8	1.0
SQC321618	3.2 ± 0.3	1.6 ± 0.2	1.8 ± 0.2	1.2	1.3	1.5
SQC322517	3.2 ± 0.3	2.5 ± 0.2	1.55 ± 0.15	1.2	1.3	2.0
SQC322520	3.2 ± 0.3	2.5 ± 0.2	2.0 ± 0.2	1.2	1.3	2.0
SQC453226	4.5 ± 0.3	3.6 ± 0.2	2.6 ± 0.2	2.0	1.5	3.0

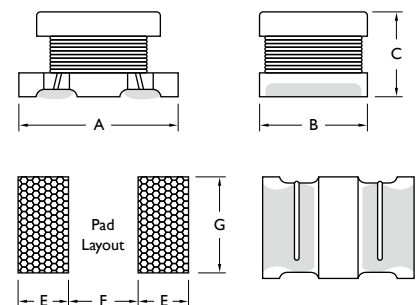


PRODUCT IDENTIFICATION



- Packaging: T = Tape and Reel
- Internal No.: N = Lead-Free

Unit: mm





ELECTRICAL CHARACTERISTICS SQC201609

PART NO.	IMPEDANCE (μH)	TOLERANCE ($\pm\%$)	TEST FREQUENCY (MHz)	SRF (MHz) Min.	DC RESISTANCE (Ω) $\pm 30\%$	RATED CURRENT (mA) Max.
SQC201609T-1R0□-N	1.0	20	I	100	0.30	485
SQC201609T-1R5□-N	1.5	20	I	95	0.40	445
SQC201609T-2R2□-N	2.2	20	I	70	0.48	425
SQC201609T-3R3□-N	3.3	20	I	65	0.60	375
SQC201609T-4R7□-N	4.7	20	I	60	0.80	300
SQC201609T-5R6□-N	5.6	20	I	60	0.90	280
SQC201609T-6R8□-N	6.8	20	I	55	1.00	255
SQC201609T-8R2□-N	8.2	20	I	50	1.10	235
SQC201609T-100□-N	10	10 / 20	I	48	1.20	225
SQC201609T-120□-N	12	10 / 20	I	44	1.40	210
SQC201609T-150□-N	15	10 / 20	I	40	1.60	200
SQC201609T-180□-N	18	10 / 20	I	35	1.80	190
SQC201609T-220□-N	22	10 / 20	I	30	2.10	185
SQC201609T-270□-N	27	10 / 20	I	30	2.50	180
SQC201609T-330□-N	33	10 / 20	I	28	2.80	160
SQC201609T-390□-N	39	10 / 20	I	24	4.40	125
SQC201609T-470□-N	47	10 / 20	I	18	5.10	120
SQC201609T-560□-N	56	10 / 20	I	17	5.70	110
SQC201609T-680□-N	68	10 / 20	I	14	6.60	100
SQC201609T-820□-N	82	10 / 20	I	14	7.50	90

Note:

Tolerance: K = $\pm 10\%$, M = $\pm 20\%$

Tolerance of Inductance: 1.0 μH to 8.2 μH $\pm 20\%$, 10 μH to 82 μH $\pm 10\%$

Test Instruments: L/Q- HP4284A

SRF- HP4287A

RDC- CH502BC

IDC- Self temperature rise shall be limited to 40 °C Max. Inductance drop 30% typ.

Soldering Heat: 260 °C 10 sec. after 150 °C Preheat Cycle for 4 Min.

Operating Temperature Range: -40 °C to +85 °C

ELECTRICAL CHARACTERISTICS SQC321618

PART NO.	IMPEDANCE (μ H)	TOLERANCE ($\pm$ %)	TEST FREQUENCY (MHz)	SRF (MHz) Min.	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
SQC321618T-R12□-N	0.12	20	I	250	0.112	970
SQC321618T-R22□-N	0.22	20	I	250	0.140	850
SQC321618T-R47□-N	0.47	20	I	180	0.210	700
SQC321618T-1R0□-N	1.00	20	I	100	0.364	510
SQC321618T-2R2□-N	2.20	20	I	50	0.533	430
SQC321618T-4R7□-N	4.70	10 / 20	I	31	0.845	340
SQC321618T-100□-N	10.0	5 / 10	I	20	1.690	230
SQC321618T-220□-N	22.0	5 / 10	I	14	3.900	160
SQC321618T-470□-N	47.0	5 / 10	I	10	10.40	100
SQC321618T-101□-N	100	5 / 10	I	7	15.60	80

Note:

Tolerance: J = $\pm$ 5%, K = $\pm$ 10%, M = $\pm$ 20%

Test Instruments: L/Q- HP4192A LF Impedance Analyzer

SRF- HP4291A RF Impedance Analyzer

RDC- CH502BC

IDC- Self temperature rise shall be limited to 35 °C Max. Inductance drop 10% typ.

Soldering Heat: 260 °C 10 sec. after 150 °C Preheat Cycle for 4 Min.

Operating Temperature Range: -25 °C to +85 °C

ELECTRICAL CHARACTERISTICS SQC322517

PART NO.	IMPEDANCE (μ H)	TOLERANCE ($\pm$ %)	TEST FREQUENCY (MHz)	SRF (MHz) Min.	DC RESISTANCE (Ω) $\pm$ 30%	RATED CURRENT (mA) Max.
SQC322517T-2R2□-N	2.20	20	I	64	0.097	790
SQC322517T-3R3□-N	3.30	20	I	50	0.120	710
SQC322517T-6R8□-N	6.80	20	I	32	0.250	540
SQC322517T-100□-N	10.0	10 / 20	I	26	0.300	350
SQC322517T-220□-N	22.0	10 / 20	I	19	0.710	250
SQC322517T-101□-N	100	10 / 20	I	10	3.500	100

Note:

Tolerance: K = $\pm$ 10%, M = $\pm$ 20%

Tolerance of Inductance: 2.2 μ H to 6.8 μ H $\pm$ 20%, 10 μ H to 100 μ H $\pm$ 10%

Test Instruments: L/Q- HP4284A

SRF- HP4287A

RDC- CH502BC

IDC- Self temperature rise shall be limited to 35 °C Max. Inductance drop 10% typ.

Soldering Heat: 260 °C 10 sec. after 150 °C Preheat Cycle for 4 Min.

Operating Temperature Range: -25 °C to +85 °C



ELECTRICAL CHARACTERISTICS SQC322520

PART NO.	IMPEDANCE (μ H)	TOLERANCE ($\pm$ %)	TEST FREQUENCY	SRF (MHz) Min.	DC RESISTANCE (Ω) $\pm$ 30%	RATED CURRENT (mA) Max.
SQC322520T-1R0□-N	1.00	20	1 MHz	96	0.09	1,000
SQC322520T-2R2□-N	2.20	20	1 MHz	64	0.13	600
SQC322520T-4R7□-N	4.70	20	1 MHz	43	0.20	450
SQC322520T-100□-N	10.0	20	1 MHz	26	0.44	300
SQC322520T-220□-N	22.0	10 / 20	1 MHz	19	0.71	250
SQC322520T-470□-N	47.0	10 / 20	1 MHz	15	1.30	170
SQC322520T-101□-N	100	10 / 20	1 MHz	10	3.50	100
SQC322520T-221□-N	220	10 / 20	1 MHz	6.8	8.40	70
SQC322520T-331□-N	330	10 / 20	1 MHz	5.6	10.0	60
SQC322520T-391□-N	390	10 / 20	1 MHz	5.0	17.0	60
SQC322520T-471□-N	470	10 / 20	1 KHz	5.0	19.0	60
SQC322520T-561□-N	560	10 / 20	1 KHz	5.0	22.0	60

ELECTRICAL CHARACTERISTICS SQC453226

PART NO.	IMPEDANCE (μ H)	TOLERANCE ($\pm$ %)	TEST FREQUENCY	SRF (MHz) Min.	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
SQC453226T-1R0□-N	1.00	20	1 MHz	100	0.08	1,080
SQC453226T-1R5□-N	1.50	20	1 MHz	85	0.09	1,000
SQC453226T-2R2□-N	2.20	20	1 MHz	60	0.11	900
SQC453226T-3R3□-N	3.30	20	1 MHz	47	0.13	800
SQC453226T-4R7□-N	4.70	10 / 20	1 MHz	35	0.15	750
SQC453226T-6R8□-N	6.80	10 / 20	1 MHz	30	0.20	720
SQC453226T-100□-N	10.0	5 / 10	1 MHz	23	0.24	650
SQC453226T-150□-N	15.0	5 / 10	1 MHz	20	0.32	570
SQC453226T-220□-N	22.0	5 / 10	1 MHz	15	0.60	420
SQC453226T-330□-N	33.0	5 / 10	1 MHz	12	1.00	310
SQC453226T-470□-N	47.0	5 / 10	1 MHz	10	1.10	280
SQC453226T-680□-N	68.0	5 / 10	1 MHz	8.4	1.70	220
SQC453226T-101□-N	100	5 / 10	1 MHz	6.8	2.20	190
SQC453226T-151□-N	150	5 / 10	1 MHz	5.5	3.50	130
SQC453226T-221□-N	220	5 / 10	1 MHz	4.5	4.00	110
SQC453226T-331□-N	330	5 / 10	1 MHz	3.6	6.80	100
SQC453226T-471□-N	470	5 / 10	1 KHz	3.0	8.50	90

Note:

Tolerance: J = $\pm$ 5%, K = $\pm$ 10%, M = $\pm$ 20%

Test Instruments: L/Q- HP4192A LF Impedance Analyzer

SRF- HP4291A RF Impedance Analyzer

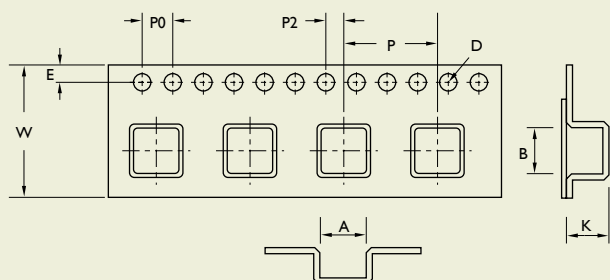
RDC- CH502BC

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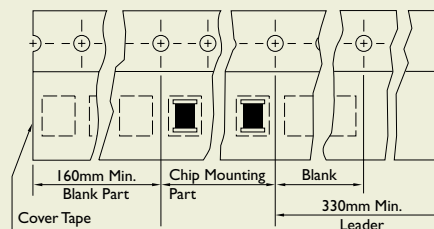
TAPE DIMENSIONS



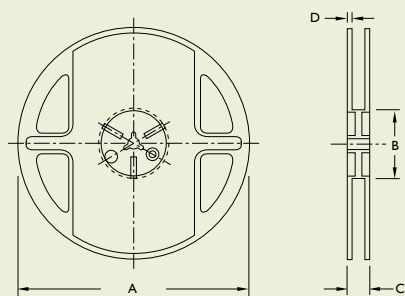
TAPE MATERIAL

Carrier Tape: Polystyrene

Cover Tape: Polyethylene



REEL DIMENSIONS



Dimensions: mm

TYPE	TAPE DIMENSIONS									REEL DIMENSIONS				QUANTITY/ REEL
	A	B	K	D	E	W	P	P0	P2	A	B	C	D	
SQC201609	1.90	2.30	1.10	1.55	1.75	8	4	4	2	178	60	9.0	1.5	3,000
SQC321618	1.85	3.55	2.05	1.50	1.75	8	4	4	2	178	60	9.0	1.5	2,000
SQC322517	2.85	3.56	1.80	1.55	1.75	8	4	4	2	178	60	9.0	1.5	2,000
SQC322520	2.90	3.60	2.25	1.50	1.75	8	4	4	2	178	60	9.0	1.5	2,000
SQC453226	3.60	4.90	3.00	1.50	1.75	12	8	4	2	178	60	13.2	1.5	500