

SQC Series



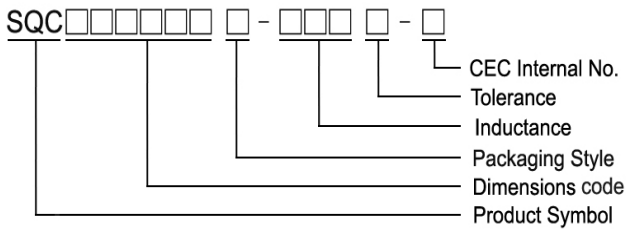
Features

- RoHS compliant
- 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

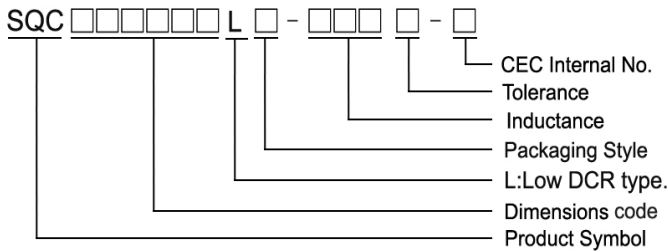
Applications

- Personal computers
- Disk drives and computer peripherals
- Pagers, cordless phone
- DC power supply circuit

Product Identification



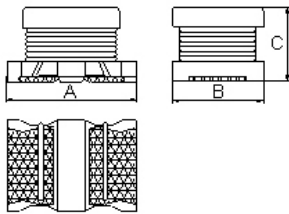
- Packaging: T : Tape and Reel



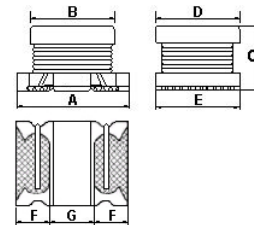
- Packaging: T : Tape and Reel

Shape and Dimensions

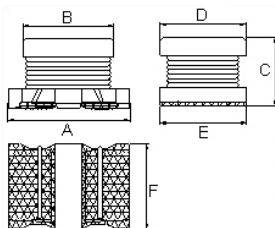
SQC321618 & SQC322520 & SQC322520LT



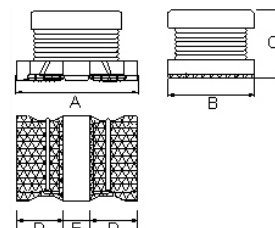
SQC322517 & SQC322517HP



SQC453226



SQC575047



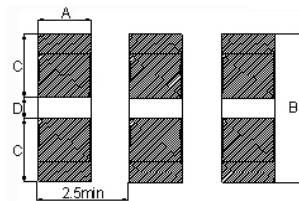
SMD Wire Wound Ferrite Chip Inductors - SQC Series

Dimensions in mm

TYPE	A	B	C	D	E	F	G
SQC321618	3.2 ± 0.3	1.6 ± 0.2	1.8 ± 0.2	-	-	-	-
SQC322517	3.2 ± 0.3	2.5 ± 0.2	1.55 ± 0.15	2.5 ± 0.2	2.5 ± 0.2	0.9 ± 0.3	1.3 ± 0.2
SQC322517HP	3.2 ± 0.3	2.5 ± 0.2	1.55 ± 0.15	2.5 ± 0.2	2.5 ± 0.2	0.9 ± 0.3	1.3 ± 0.2
SQC322520	3.2 ± 0.3	2.5 ± 0.2	2.0 ± 0.2	-	-	-	-
SQC322520LT	3.2 ± 0.3	2.5 ± 0.2	2.0 ± 0.2	-	-	-	-
SQC453226	4.5 ± 0.3	3.6 ± 0.2	2.6 ± 0.2	3.2 ± 0.2	3.2 ± 0.2	3.2 ± 0.2	-
SQC575047	5.7 ± 0.3	5.0 ± 0.3	4.7 ± 0.3	1.3 Min	1.7 Min	-	-

Recommended Pattern

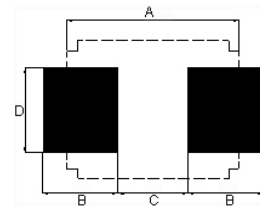
SQC321618



Dimensions in mm

TYPE	A	B	C	D
SQC321618	1.5	4.5	1.75	1.0

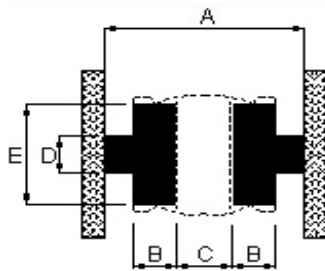
SQC575047



Dimensions in mm

TYPE	A	B	C	D
SQC575047	8.0	3.0	2.0	3.5

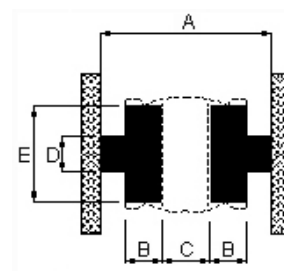
SQC322517 & SQC322517HP



Dimensions in mm

TYPE	A	B	C	D	E
SQC322517	5.5	1.0	1.3	1.0	2.0
SQC322517HP	5.5	1.0	1.3	1.0	2.0

SQC322520 & SQC322520LT & SQC453226



Dimensions in mm

TYPE	A	B	C	D	E
SQC322520	5.5	1.0	1.3	1.0	2.0
SQC322520LT	5.5	1.0	1.3	1.0	2.0
SQC453226	7.5	1.5	1.5	1.5	3.0

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	D.C. Resistance (Ω) Max	SRF (MHz) Min	Rated current (mA)
SQC321618T-R12□-N	0.12	20	1	0.112	250	970
SQC321618T-R22□-N	0.22	20	1	0.140	250	850
SQC321618T-R47□-N	0.47	20	1	0.210	180	700
SQC321618T-1R0□-N	1.0	20	1	0.364	100	510
SQC321618T-2R2□-N	2.2	20	1	0.533	50	430
SQC321618T-4R7□-N	4.7	20 / 10	1	0.845	31	340
SQC321618T-100□-N	10	10 / 5	1	1.690	20	230
SQC321618T-220□-N	22	10 / 5	1	3.900	14	160
SQC321618T-470□-N	47	10 / 5	1	10.40	10	100
SQC321618T-101□-N	100	10 / 5	1	15.60	7	80

- When ordering, please specify tolerance and packaging codes
- Rated Current: Self temperature rise shall be limited to 35°C Max. Inductance drop 10% typ.
- Tolerance : J = ±5% , K = ±10% , M = ±20%
- Operating temp: - 2 5 °C ~ 1 2 5 °C (Including self - temperature rise)
- Soldering Heat: 260°C 10 seconds after 150°C preheat cycle for 4 minutes
- Test Equipment: L: HP4192A. LF Impedance Analyzer
SRF: HP4291A RF Impedance Analyzer
DCR: CH502BC

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	D.C. Resistance (Ω±30%)	SRF (MHz) Min	Rated current (mA)
SQC322517T-2R2□-N	2.2	20	1	0.097	64	790
SQC322517T-3R3□-N	3.3	20	1	0.12	50	710
SQC322517T-6R8□-N	6.8	20	1	0.25	32	540
SQC322517T-100□-N	10	10,20	1	0.30	26	350
SQC322517T-220□-N	22	10,20	1	0.71	19	250
SQC322517T-101□-N	100	10,20	1	3.50	10	100

- When ordering, please specify tolerance and packaging codes
- Rated Current: Inductance drop 10% typ.
- Tolerance : K = ±10% , M = ±20%
- Operating temp: - 2 5 °C ~ 1 2 5 °C (Including self - temperature rise)
- Soldering Heat: 260°C 10 seconds after 150°C preheat cycle for 4 minutes
- Test Equipment: L: HP4284A
SRF: HP4287A
DCR: CH502BC

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	D.C. Resistance (Ω±20%)	SRF (MHz) Min	Rated current (mA)	I _{rms} (mA)
SQC322517HP-R47□-N	0.47	30	1	0.030	100	3400	2550
SQC322517HP-1R0□-N	1.0	30	1	0.045	100	2300	2050
SQC322517HP-1R5□-N	1.5	30	1	0.057	70	1750	1750
SQC322517HP-2R2□-N	2.2	30	1	0.076	70	1550	1600
SQC322517HP-3R3□-N	3.3	30	1	0.120	50	1250	1200
SQC322517HP-4R7□-N	4.7	30	1	0.180	40	1000	1000
SQC322517HP-6R8□-N	6.8	30	1	0.240	40	850	850
SQC322517HP-100□-N	10	30	1	0.380	30	750	700
SQC322517HP-150□-N	15	30	1	0.700	25	550	500
SQC322517HP-220□-N	22	30	1	0.810	20	500	450
SQC322517HP-330□-N	33	30	1	1.050	14	360	320
SQC322517HP-470□-N	47	30	1	1.480	11	280	240

- When ordering, please specify tolerance and packaging codes
- Rated Current: Self temperature rise shall be limited to 40°C Max. Inductance drop 30% typ.
- Tolerance : T = ±30%
- Operating temp: -40°C ~ 125°C (Including self - temperature rise)
- Soldering Heat: 260°C 10 seconds after 150°C preheat cycle for 4 minutes
- Test Equipment: L: HP4284A
SRF: HP4291A RF Impedance Analyzer
DCR: CH502BC

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	D.C. Resistance (Ω±30%)	SRF (MHz) Min	Rated current (mA)
SQC322520T-1R0□-N	1.0	20	1	0.09	96	1000
SQC322520T-2R2□-N	2.2	20	1	0.13	64	600
SQC322520T-4R7□-N	4.7	20	1	0.20	43	450
SQC322520T-100□-N	10	20	1	0.44	26	300
SQC322520T-220□-N	22	20 / 10	1	0.71	19	250
SQC322520T-470□-N	47	20 / 10	1	1.30	15	170
SQC322520T-101□-N	100	20 / 10	1	3.50	10	100
SQC322520T-221□-N	220	20 / 10	1	8.40	6.8	70
SQC322520T-331□-N	330	20 / 10	1	10.0	5.6	60
SQC322520T-391□-N	390	20 / 10	1	17.0	5.0	60
SQC322520T-471□-N	470	20 / 10	0.001	19.0	5.0	60
SQC322520T-561□-N	560	20 / 10	0.001	22.0	5.0	60

- When ordering, please specify tolerance and packaging codes
- Rated Current: Self temperature rise shall be limited to 35°C Max. Inductance drop 10% typ.
- Tolerance : K = ±10% , M = ±20%
- Operating temp: -40°C ~ 125°C (Including self - temperature rise)
- Soldering Heat: 260°C 10 seconds after 150°C preheat cycle for 4 minutes
- Test Equipment: L: HP4192A. LF Impedance Analyzer
SRF: HP4291A RF Impedance Analyzer
DCR: CH502BC

Electrical Characteristics (LOW DCR Type)

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	D.C. Resistance (Ω±30%)	SRF (MHz) Min	Rated current (mA)
SQC322520LT-R15□-N	0.15	20	1	0.028	400	1450
SQC322520LT-R27□-N	0.27	20	1	0.034	250	1250
SQC322520LT-R47□-N	0.47	20	1	0.042	150	1100
SQC322520LT-1R0□-N	1.0	20	1	0.060	100	1000
SQC322520LT-2R2□-N	2.2	20	1	0.097	64	790
SQC322520LT-4R7□-N	4.7	20	1	0.15	43	650
SQC322520LT-100□-N	10	20 / 10	1	0.30	26	450

- When ordering, please specify tolerance and packaging codes
- Rated Current: Self temperature rise shall be limited to 35°C Max. Inductance drop 10% typ.
- Tolerance : K = ±10% , M = ±20%
- Operating temp: - 2 5 °C ~ 1 2 5 °C (Including self - temperature rise)
- Soldering Heat: 260°C 10 seconds after 150°C preheat cycle for 4 minutes
- Test Equipment: L: HP4192A. LF Impedance Analyzer
SRF: HP4291A RF Impedance Analyzer
DCR: CH502BC

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	D.C. Resistance (Ω) Max	SRF (MHz) Min	Rated current (mA)
SQC453226T-1R0□-N	1.0	20	1	0.08	100	1080
SQC453226T-1R5□-N	1.5	20	1	0.09	85	1000
SQC453226T-2R2□-N	2.2	20	1	0.11	60	900
SQC453226T-3R3□-N	3.3	20	1	0.13	47	800
SQC453226T-4R7□-N	4.7	10 / 20	1	0.15	35	750
SQC453226T-6R8□-N	6.8	10 / 20	1	0.20	30	720
SQC453226T-100□-N	10	5 / 10	1	0.24	23	650
SQC453226T-150□-N	15	5 / 10	1	0.32	20	570
SQC453226T-220□-N	22	5 / 10	1	0.60	15	420
SQC453226T-330□-N	33	5 / 10	1	1.0	12	310
SQC453226T-470□-N	47	5 / 10	1	1.1	10	280
SQC453226T-680□-N	68	5 / 10	1	1.7	8.4	220
SQC453226T-101□-N	100	5 / 10	1	2.2	6.8	190
SQC453226T-151□-N	150	5 / 10	1	3.5	5.5	130
SQC453226T-221□-N	220	5 / 10	1	4.0	4.5	110
SQC453226T-331□-N	330	5 / 10	1	6.8	3.6	100
SQC453226T-471□-N	470	5 / 10	0.001	8.5	3.0	90

- When ordering, please specify tolerance and packaging codes
- Rated Current: Self temperature rise shall be limited to 35°C Max. Inductance drop 10% typ.
- Tolerance : J = ±5% , K = ±10% , M = ±20%
- Operating temp: - 2 5 °C ~ 1 2 5 °C (Including self - temperature rise)
- Soldering Heat: 260°C 10 seconds after 150°C preheat cycle for 4 minutes
- Test Equipment: L: HP4192A. LF Impedance Analyzer
SRF: HP4291A RF Impedance Analyzer
DCR: CH502BC

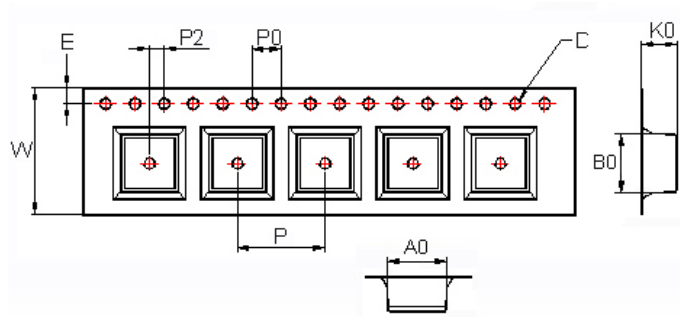
Electrical Characteristics

Part Number	Inductance (μH)	Tolerance ($\pm\%$)	Test Frequency (MHz)	D.C. Resistance (Ω) Max	SRF (MHz) Min	Rated current (mA)
SQC575047T-R12□-N	0.12	20	1	0.0098	450	6000
SQC575047T-R27□-N	0.27	20	1	0.0140	300	5300
SQC575047T-R47□-N	0.47	20	1	0.0182	200	4800
SQC575047T-1R0□-N	1.0	20	1	0.0270	150	4000
SQC575047T-1R5□-N	1.5	20	1	0.0310	110	3700
SQC575047T-2R2□-N	2.2	20	1	0.0410	80	3200
SQC575047T-3R3□-N	3.3	20	1	0.0500	40	2900
SQC575047T-4R7□-N	4.7	20	1	0.0574	30	2700
SQC575047T-6R8□-N	6.8	20	1	0.1040	25	2000
SQC575047T-100□-N	10	10 / 20	1	0.1300	20	1700
SQC575047T-150□-N	15	10 / 20	1	0.210	17	1400
SQC575047T-220□-N	22	10 / 20	1	0.266	15	1200
SQC575047T-330□-N	33	10 / 20	1	0.448	12	900
SQC575047T-470□-N	47	10 / 20	1	0.560	10	800
SQC575047T-680□-N	68	10 / 20	1	0.938	7.6	640
SQC575047T-101□-N	100	10 / 20	0.1	1.204	6.5	560
SQC575047T-151□-N	150	10 / 20	0.1	2.660	5.0	420
SQC575047T-221□-N	220	10 / 20	0.1	3.360	4.0	320
SQC575047T-331□-N	330	10 / 20	0.1	6.160	3.1	270
SQC575047T-471□-N	470	10 / 20	0.1	7.560	2.4	240
SQC575047T-681□-N	680	10 / 20	0.1	11.34	1.9	190
SQC575047T-102□-N	1000	10 / 20	0.01	14.42	1.7	150
SQC575047T-222□-N	2200	10 / 20	0.01	30.10	1.2	100
SQC575047T-472□-N	4700	10 / 20	0.01	61.04	0.8	70
SQC575047T-103□-N	10000	10 / 20	0.01	140.0	0.5	50

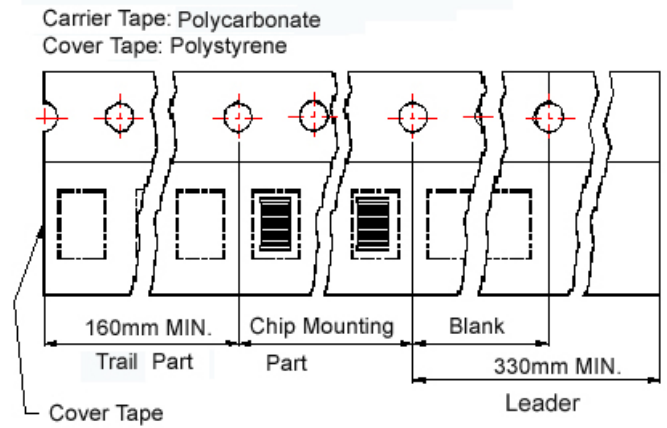
- When ordering, please specify tolerance and packaging codes
- Rated Current: Self temperature rise shall be limited to 35°C Max. Inductance drop 10% typ.
- Tolerance : K = $\pm 10\%$, M = $\pm 20\%$
- Operating temp : $-25^{\circ}\text{C} \sim 125^{\circ}\text{C}$ (Including self - temperature rise)
- Soldering Heat : 260°C 10 seconds after 150°C preheat cycle for 4 minutes.
- Test equipment: L:HP4192. LF Impedance Analyzer
SRF:HP4291A RF Impedance Analyzer
DCR:CH502BC

Packaging Specifications

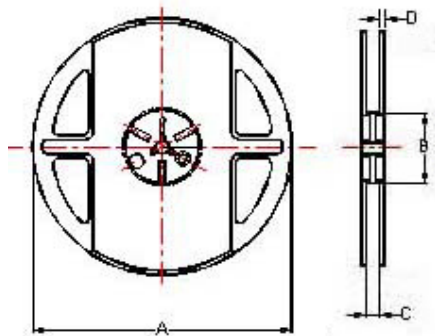
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions									Reel Dimensions				Quantity
	A0	B0	K0	D	E	W	P	P0	P2	A	B	C	D	PCS / REEL
SQC201609	1.9	2.3	1.1	1.55	1.75	8	4	4	2	178	60	9	1.5	3000
SQC3010	3.2	3.2	1.4	1.55	1.75	8	4	4	2	178	60	9	1.5	2000
SQC321618	1.85	3.55	2.05	1.5	1.75	8	4	4	2	178	60	9	1.5	2000
SQC322517	2.85	3.56	1.80	1.55	1.75	8	4	4	2	178	60	9	1.5	2000
SQC322517HP	2.85	3.56	1.80	1.55	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
SQC322520LT	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