

Cautions and Warnings

Please be noted that this spec is only for reference if you have projects designed with the product number listed in. If you are looking for new project design-in, please find BWQC Series specification/datasheet on Chilisin website. Or you may find our sales contact for more information on old part number at your convenience. Appreciated your attention and understanding.

Note: Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

SQC Series



The SQC Series is a type of miniature wire-wound chip inductor designed on a special ferrite core. They are excellent for use in DC power supply circuits.

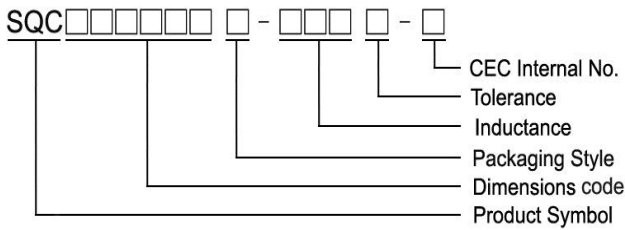
Features

- 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

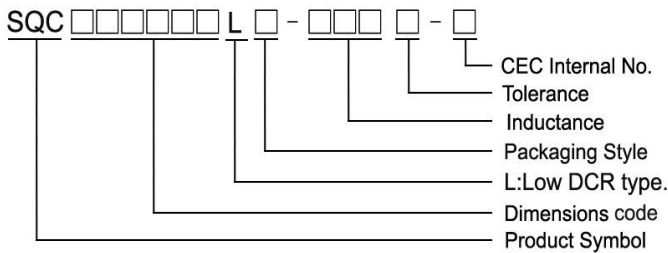
Applications

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

Product Identification



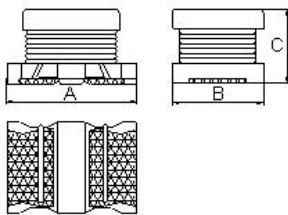
- Packaging: T : Tape and Reel



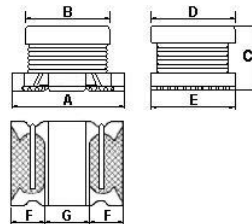
- Packaging: T : Tape and Reel

Shape and Dimensions

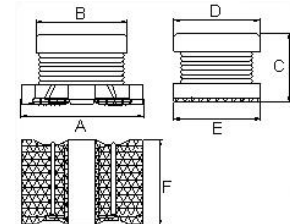
SQC322520 & SQC322520LT



SQC322517 & SQC322517HP



SQC453226



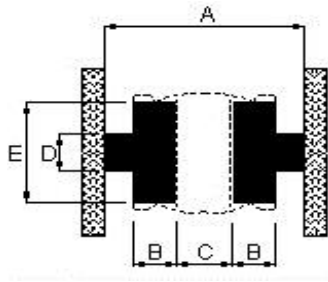
Dimensions in mm

TYPE	A	B	C	D	E	F	G
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	0.95 ± 0.3	1.2 ± 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	-

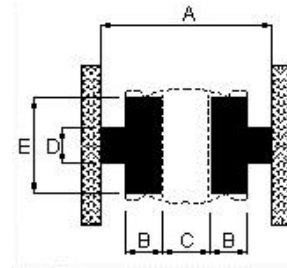
SMD Wire Wound Ferrite Chip Inductors - SQC Series

Recommended Pattern

SQC322517 & SQC322517HP



SQC322520 & SQC322520LT & SQC453226



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	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

NOT FOR NEW DESIGN

Electrical Characteristics

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

Note: When ordering, please specify tolerance code. Tolerance : K=±10% , M=±20%

- Operating temperature range - 25°C ~ 125°C(Including self - temperature rise)
- Rated Current for Inductance drop 10% from its value with current
- Measure Equipment :
 L : Agilent HP4192A
 SRF : Agilent HP4287A
 RDC : Chroma 16502

SMD Wire Wound Ferrite Chip Inductors – LS Series

Electrical Characteristics

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

Note: When ordering, please specify tolerance code. Tolerance : M=±20% , T=±30%

- Operating temperature range - 25°C ~ 125°C(Including self - temperature rise)
- Rated Current : Self temperature rise shall be limited to 40°C Max Inductance drop 30% typ.
- Measure Equipment :
L : Agilent HP4192A
SRF : Agilent HP4291A
RDC : Chroma 16502

SMD Wire Wound Ferrite Chip Inductors – SQC Series

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω±30%)	Rated current (mA)
SQC322520T-R47□-N	0.47	20	1	150	0.042	1100
SQC322520T-1R0□-N	1.0	20	1	96	0.09	1000
SQC322520T-2R2□-N	2.2	20	1	64	0.13	600
SQC322520T-3R3□-N	3.3	20 / 10	1	60	0.15	600
SQC322520T-3R9□-N	3.9	20	1	50	0.16	500
SQC322520T-4R7□-N	4.7	20	1	43	0.20	450
SQC322520T-6R8□-N	6.8	20	1	30	0.26	400
SQC322520T-100□-N	10	20 / 10	1	26	0.44	300
SQC322520T-150□-N	15	20 / 10	1	22	0.55	350
SQC322520T-220□-N	22	20 / 10	1	19	0.71	250
SQC322520T-270□-N	27	20 / 10	1	15	0.90	230
SQC322520T-330□-N	33	20 / 10	1	15	1.10	200
SQC322520T-470□-N	47	20 / 10	1	15	1.30	170
SQC322520T-560□-N	56	20 / 10	1	12	2.30	150
SQC322520T-101□-N	100	20 / 10	1	10	3.50	100
SQC322520T-151□-N	150	20 / 10 / 5	1	7	6.00	80
SQC322520T-221□-N	220	20 / 10 / 5	1	6.8	8.40	70
SQC322520T-271□-N	270	20 / 10	1	6	10.0	65
SQC322520T-331□-N	330	20 / 10 / 5	1	5.6	10.0	60
SQC322520T-391□-N	390	20 / 10	1	5	17.0	60
SQC322520T-471□-N	470	20 / 10	0.001	5	19.0	60
SQC322520T-561□-N	560	20 / 10	0.001	5	22.0	60

Note: When ordering, please specify tolerance code. Tolerance : J=±5% , K=±10% , M=±20%

- Operating temperature range - 25°C ~ 125°C(Including self - temperature rise)
- Rated Current : Self temperature rise shall be limited to 35°C Max Inductance drop 10% typ.
- Measure Equipment :
 L : Agilent HP4192A
 SRF : Agilent HP4291A
 RDC : Chroma 16502
 Rate Current : HP4284A+HP42841A

SMD Wire Wound Ferrite Chip Inductors – SQC Series

Electrical Characteristics (LOW DCR Type)

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω±30%)	Rated current (mA)
SQC322520LT-R15□-N	0.15	20	1	400	0.028	1450
SQC322520LT-R27□-N	0.27	20	1	250	0.034	1250
SQC322520LT-R47□-N	0.47	20	1	150	0.042	1100
SQC322520LT-1R0□-N	1.0	20	1	100	0.060	1000
SQC322520LT-1R5□-N	1.5	20	1	85	0.085	900
SQC322520LT-2R2□-N	2.2	20	1	64	0.097	790
SQC322520LT-3R3□-N	3.3	20	1	55	0.13	700
SQC322520LT-4R7□-N	4.7	20 / 10	1	43	0.15	650
SQC322520LT-6R8□-N	6.8	20	1	30	0.21	600
SQC322520LT-100□-N	10	20 / 10	1	26	0.30	450

Note: When ordering, please specify tolerance code. Tolerance : K=±10% , M=±20%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Rated Current : Self temperature rise shall be limited to 35°C Max Inductance drop 10% typ.
- Measure Equipment :
 - L : Agilent HP4192A
 - SRF : Agilent HP4291A
 - RDC : Chroma 16502
 - Rate Current : HP4284A+HP42841A

SMD Wire Wound Ferrite Chip Inductors – SQC Series

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance (\pm %)	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	Rated current (mA)
SQC453226T-1R0□-N	1.0	20	1	100	0.08	1080
SQC453226T-1R5□-N	1.5	20	1	85	0.09	1000
SQC453226T-1R8□-N	1.8	20	1	65	0.10	900
SQC453226T-2R2□-N	2.2	20 / 10	1	60	0.11	900
SQC453226T-3R3□-N	3.3	20	1	47	0.13	800
SQC453226T-4R7□-N	4.7	20 / 10	1	35	0.15	750
SQC453226T-6R8□-N	6.8	20 / 10	1	30	0.20	720
SQC453226T-100□-N	10	20 / 10 / 5	1	23	0.24	650
SQC453226T-150□-N	15	20 / 10 / 5	1	20	0.32	570
SQC453226T-220□-N	22	20 / 10 / 5	1	15	0.60	420
SQC453226T-330□-N	33	20 / 10 / 5	1	12	1.0	310
SQC453226T-470□-N	47	20 / 10 / 5	1	10	1.1	280
SQC453226T-680□-N	68	20 / 10 / 5	1	8.4	1.7	220
SQC453226T-101□-N	100	20 / 10 / 5	1	6.8	2.2	190
SQC453226T-151□-N	150	20 / 10 / 5	1	5.5	3.5	130
SQC453226T-221□-N	220	20 / 10 / 5	1	4.5	4.0	110
SQC453226T-331□-N	330	20 / 10 / 5	1	3.6	6.8	100
SQC453226T-471□-N	470	20 / 10 / 5	1	3.0	8.5	90
SQC453226T-561□-N	560	20 / 10 / 5	0.001	2.5	10.4	80
SQC453226T-681□-N	680	20 / 10 / 5	0.001	2.2	14.7	70
SQC453226T-821□-N	820	20 / 10 / 5	0.001	2.0	20.0	60
SQC453226T-102□-N	1000	20 / 10 / 5	0.001	2.0	27.9	50
SQC453226T-152□-N	1500	20 / 10 / 5	0.001	1.8	35.0	40

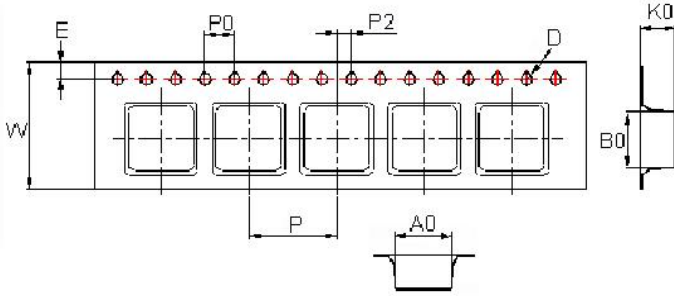
Note: When ordering, please specify tolerance code. Tolerance : J= \pm 5% , K= \pm 10% , M= \pm 20%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
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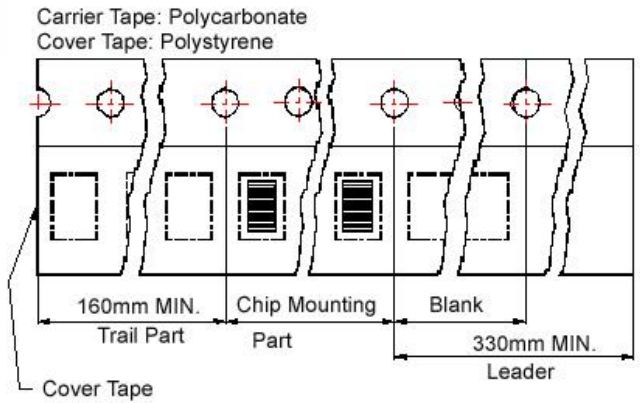
SMD Wire Wound Ferrite Chip Inductors - SQC Series

Packaging Specifications

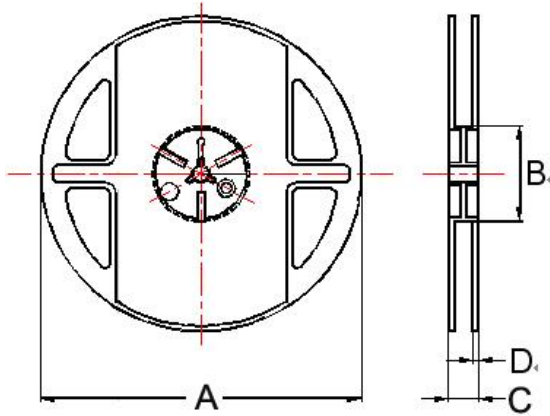
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions									Reel Dimensions				Quantity PCS / REEL
	A0	B0	K0	D	E	W	P	P0	P2	A	B	C	D	
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