

SQC Series



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.

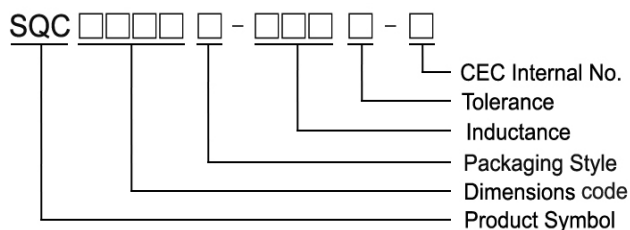
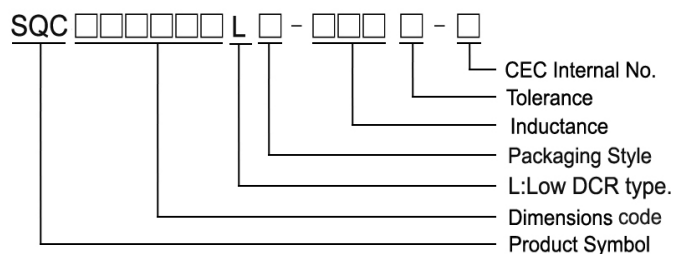
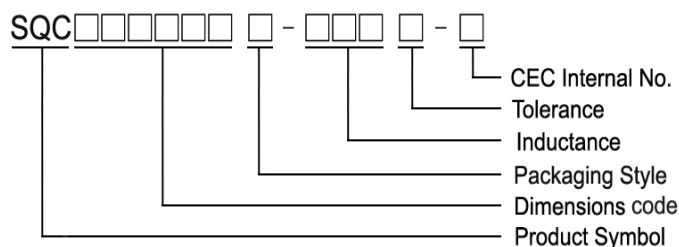
Features

- 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

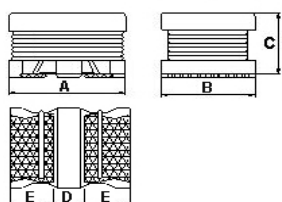
Product Identification



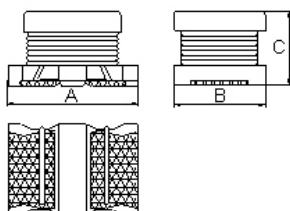
- Packaging: T : Tape and Reel
- SQC__LT: Low DCR Type

Shapes and Dimensions

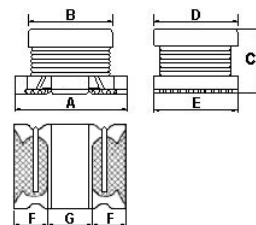
SQC201609



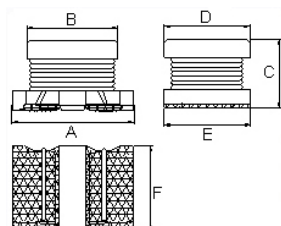
SQC321618 & SQC322520 & SQC322520LT



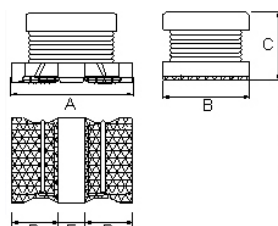
SQC322517 & SQC322517HP



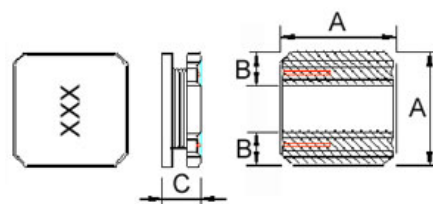
SQC453226



SQC575047



SQC3010



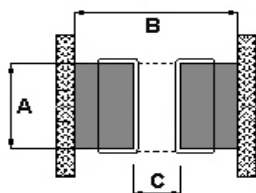
SMD Wire Wound Ferrite Chip Inductors - SQC Series

Dimensions in mm

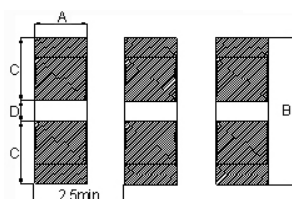
TYPE	A	B	C	D	E	F	G
SQC201609	2.0 ± 0.2	1.6 ± 0.2	0.95 ± 0.05	0.8 ± 0.2	0.6 ± 0.2	-	-
SQC3010	3.0 ± 0.2	0.875 ± 0.2	1.1 Max				
SQC321618	3.2 ± 0.3	1.6 ± 0.2	1.8 ± 0.2	-	-	-	-
SQC322517	3.2 ± 0.3	2.5 ± 0.2	1.55 ± 0.15	2.5 ± 0.2	2.5 ± 0.2	0.9 ± 0.3	1.3 ± 0.2
SQC322517HP	3.2 ± 0.3	2.5 ± 0.2	1.55 ± 0.15	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

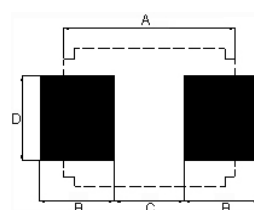
SQC201609



SQC321618



SQC575047



Dimensions in mm

A	B	C
1.0	2.6	0.8

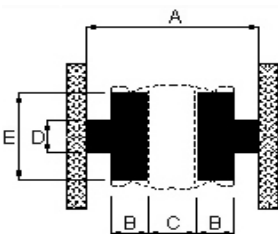
Dimensions in mm

A	B	C	D
1.5	4.5	1.75	1.0

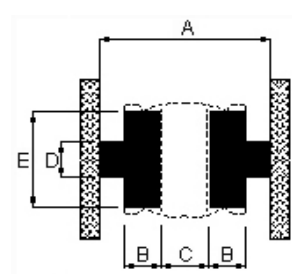
Dimensions in mm

A	B	C	D
8.0	3.0	2.0	3.5

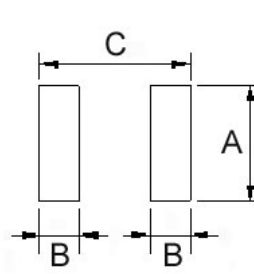
SQC322517 & 322517HP



SQC322520 & SQC322520LT & 453226



SQC3010



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

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

Dimensions in mm

TYPE	A	B	C
SQC3010	2.7	0.8	3.0



CHILISIN ELECTRONICS CORP.

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	D.C. Resistance (Ω±30%)	SRF (MHz) Min	Rated current (mA)
SQC201609T-1R0□-N	1.0	20	1	0.30	100	485
SQC201609T-1R5□-N	1.5	20	1	0.40	95	445
SQC201609T-2R2□-N	2.2	20	1	0.48	70	425
SQC201609T-3R3□-N	3.3	20	1	0.60	65	375
SQC201609T-4R7□-N	4.7	20	1	0.80	60	300
SQC201609T-5R6□-N	5.6	20	1	0.90	60	280
SQC201609T-6R8□-N	6.8	20	1	1.0	55	255
SQC201609T-8R2□-N	8.2	20	1	1.1	50	235
SQC201609T-100□-N	10	10 / 20	1	1.2	48	225
SQC201609T-120□-N	12	10 / 20	1	1.4	44	210
SQC201609T-150□-N	15	10 / 20	1	1.6	40	200
SQC201609T-180□-N	18	10 / 20	1	1.8	35	190
SQC201609T-220□-N	22	10 / 20	1	2.1	30	185
SQC201609T-270□-N	27	10 / 20	1	2.5	30	180
SQC201609T-330□-N	33	10 / 20	1	2.8	28	160
SQC201609T-390□-N	39	10 / 20	1	4.4	24	125
SQC201609T-470□-N	47	10 / 20	1	5.1	18	120
SQC201609T-560□-N	56	10 / 20	1	5.7	17	110
SQC201609T-680□-N	68	10 / 20	1	6.6	14	100
SQC201609T-820□-N	82	10 / 20	1	7.5	14	90

- When ordering, please specify tolerance and packaging codes.
- Rated Current: Self temperature rise shall be limited to 40℃ Max. Inductance drop 30% typ.
- Tolerance : K = ±10% , M = ±20%
- Operating temp: - 4 0℃ ~ 1 2 5℃ (Including self - temperature rise)
- Soldering Heat: 260℃ 10 seconds after 150℃ preheat cycle for 4 minutes.
- Test equipment: L: HP4284A.
SRF: HP4287A
DCR: CH502BC

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm\%$)	Test Frequency (KHz)	RDC (Ω) Max	Rated current (A)Typ	Irms (A)
SQC3010T-1R0□-N	1.0	30	100	0.072	1.70	1.40
SQC3010T-1R5□-N	1.5	30	100	0.11	1.30	1.30
SQC3010T-2R2□-N	2.2	20	100	0.18	1.20	0.95
SQC3010T-3R3□-N	3.3	20	100	0.22	0.96	0.85
SQC3010T-4R7□-N	4.7	20	100	0.29	0.77	0.68
SQC3010T-6R8□-N	6.8	20	100	0.38	0.65	0.63
SQC3010T-100□-N	10	20	100	0.64	0.56	0.50
SQC3010T-150□-N	15	20	100	0.88	0.48	0.40
SQC3010T-220□-N	22	20	100	1.55	0.37	0.32
SQC3010T-330□-N	33	20	100	1.97	0.32	0.28
SQC3010T-470□-N	47	20	100	2.73	0.27	0.20

- When ordering, please specify tolerance and packaging codes.
- Rated Current: Self temperature rise shall be limited to 35℃ Max. Inductance drops 10% typ.
- Tolerance : M = $\pm 20\%$, T = $\pm 30\%$
- Operating temp: - 40℃ ~ 125℃ (Including self - temperature rise)
- I rms: Self temperature rise shall limited to 40℃ Max.
- Test equipment: L: HP 4284A
RDC: CHEN HWA 502
IDC: HP4284A+HP42841A

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: - 4 0 °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 (μ H)	Tolerance (\pm %)	Test Frequency (MHz)	D.C. Resistance ($\Omega \pm 20\%$)	SRF (MHz) Min	Rated current (mA)	Irms (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-220□-N	22	30	1	0.810	20	500	450

- 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 = $\pm 30\%$
- Operating temp: $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$ (Including self - temperature rise)
- Soldering Heat: 260°C 10 seconds after 150°C preheat cycle for 4 minutes
- Test Equipment: L: HP4284A
SRF: HP4291A RF Impedance Analyzer
DCR: CH502BC

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm\%$)	Test Frequency (MHz)	D.C. Resistance ($\Omega \pm 30\%$)	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 = $\pm 10\%$, M = $\pm 20\%$
- Operating temp: $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$ (Including self - temperature rise)
- Soldering Heat: 260°C 10 seconds after 150°C preheat cycle for 4 minutes
- Test Equipment: L: 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℃ Max. Inductance drop 10% typ
- Tolerance : K = ±10% , M = ±20%
- Operating temp: - 4 0℃ ~ 1 2 5℃ (Including self - temperature rise)
- Soldering Heat: 260℃ 10 seconds after 150℃ preheat cycle for 4 minutes
- Test Equipment: L: HP4192A. LF Impedance Analyzer
SRF: HP4291A RF Impedance Analyzer
DCR: CH502BC

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm\%$)	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 = $\pm 5\%$, K = $\pm 10\%$, M = $\pm 20\%$
- 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

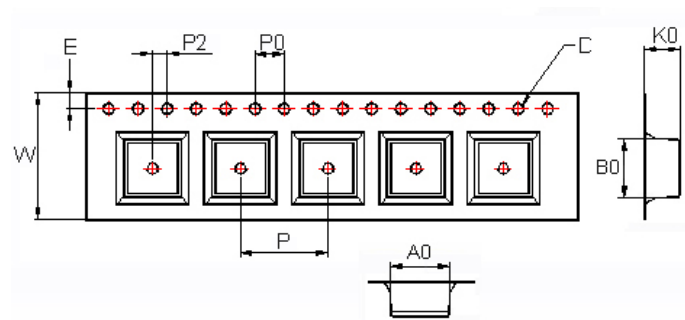
Part Number	Inductance (μ H)	Tolerance (\pm %)	Test Frequency (MHz)	D.C. Resistance (Ω) Max	SRF (MHz) Min	Rated current (mA)
SQC575047T-R12□-N	0.12	20	1	0.0098	450	6000
SQC575047T-R27□-N	0.27	20	1	0.0140	300	5300
SQC575047T-R47□-N	0.47	20	1	0.0182	200	4800
SQC575047T-1R0□-N	1.0	20	1	0.0270	150	4000
SQC575047T-1R5□-N	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℃ Max. Inductance drop 10% typ.
- Tolerance : K = \pm 10% , M = \pm 20%
- Operating temp : - 4 0℃ ~ 1 2 5℃ (Including self - temperature rise)
- Soldering Heat : 260℃ 10 seconds after 150℃ preheat cycle for 4 minutes.
- Test equipment: L:HP4192. LF Impedance Analyzer
SRF:HP4291A RF Impedance Analyzer
DCR:CH502BC

Packaging Specifications

Tape Dimensions

FIG 1



Tape Material

Carrier Tape: Polystyrene
Cover Type: Polyethylene

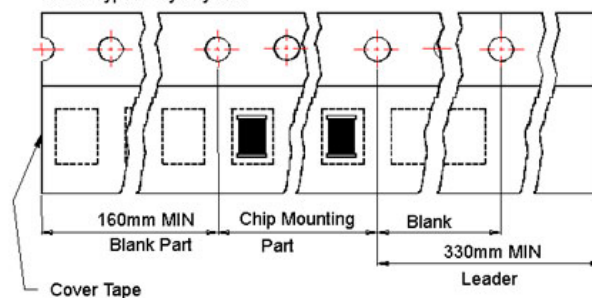
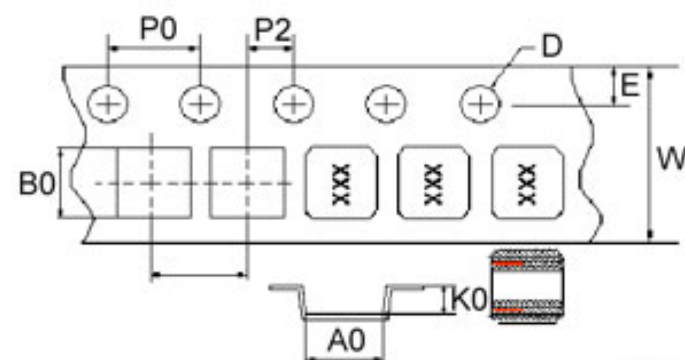
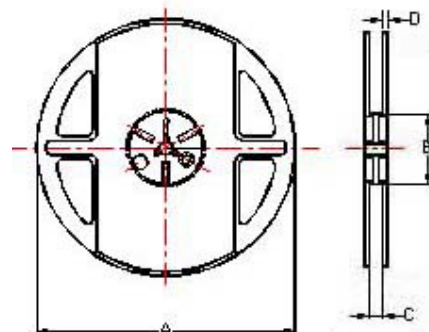


FIG 2



Reel Dimensions



Dimensions in mm

TYPE	FIG	Tape Dimensions									Reel Dimensions				Quantity PCS / REEL
		A0	B0	K0	D	E	W	P	P0	P2	A	B	C	D	
SQC201609	1	1.9	2.3	1.1	1.55	1.75	8	4	4	2	178	60	9	1.5	3000
SQC3010	2	3.2	3.2	1.4	1.55	1.75	8	4	4	2	178	60	9	1.5	2000
SQC321618	1	1.85	3.55	2.05	1.5	1.75	8	4	4	2	178	60	9	1.5	2000
SQC322517	1	2.85	3.56	1.80	1.55	1.75	8	4	4	2	178	60	9	1.5	2000
SQC322517HP	1	2.85	3.56	1.80	1.55	1.75	8	4	4	2	178	60	9	1.5	2000
SQC322520	1	2.90	3.60	2.25	1.5	1.75	8	4	4	2	178	60	9	1.5	2000
SQC322520LT	1	2.90	3.60	2.25	1.5	1.75	8	4	4	2	178	60	9	1.5	2000
SQC453226	1	3.60	4.90	3.00	1.5	1.75	12	8	4	2	178	60	13.2	1.5	500
SQC575047	1	5.4	6.0	5.5	1.5	1.75	16	12	12	2	330	100	17	1.5	1000