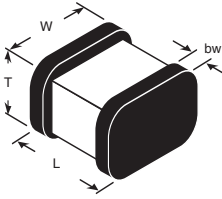


# AVX SQ and AQ Series Microwave MLCs



Dimensions: mm and (IN)				
Case	Length (L)	Width (W)	Thickness (T)	Band Width (bw)
SQCA	.055 + .015 - .010 (1.40 + .381 - .254)	.055 ± .015 (1.40 ± .381)	.020/.057 (.508/1.45)	.010 + .010 - .005 (.254 + .254 - .127)
SQCB	.110 + .020 - .010 (2.79 + .889 - .254)	.110±0.10 (2.79±.508)	.030/.102 (.762/2.59)	.015±.010 (.381±.254)
AQ12	.055 + .015 - .010 (1.40 + .381 - .256)	.055 ± .015 (1.40 ± .381)	.020/.057 (.508/1.45)	.010 + .010 - .005 (.254 + .254 - .127)
AQ14	.110 + .020 - .010 (2.79 + .889 - .508)	.110 ± .010 (2.79 ± .508)	.030/.102 (.762/2.59)	.015 ± .010 (.381 ± .254)

## AVX SQ SERIES

These porcelain and ceramic dielectric multilayer capacitor (MLC) chips are best suited for RF/Microwave applications typically ranging from 10MHz to 4.2GHz. Characteristic is a fine grained, high density, high purity dielectric material impervious to moisture with heavy internal palladium electrodes.

### Style SQCA

For quantities of 2000 and up, call for quote.

MOUSER STOCK NO.	Value (pF)	Volt	Tol. ±	Temp Coef.	Price Each				
					1	50	100	500	1000
581—SQCAEM0R1BATME	0.1	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM0R2BATME	0.2	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM0R4BATME	0.4	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM0R5BATME	0.5	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM0R8BATME	0.8	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM1R0BATME	1.0	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM1R2BATME	1.2	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM1R5BATME	1.5	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM1R6BATME	1.6	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM1R8BATME	1.8	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM2R2BATME	2.2	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM2R4BATME	2.4	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM2R7BATME	2.7	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM3R0BATME	3.0	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM3R6BATME	3.6	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM3R9BATME	3.9	150	0.1pF	M	2.21	1.96	1.47	1.23	.98
581—SQCAEM6R8BATME	6.8	150	0.1pF	M	3.38	3.00	2.25	1.88	1.50
581—SQCAEM100FATME	10	150	1%	M	3.87	3.44	2.58	2.15	1.72
581—SQCAEM470JATME	47	150	5%	M	2.25	2.00	1.50	1.25	1.00
581—SQCAEM560JATME	56	150	5%	M	2.25	2.00	1.50	1.25	1.00
581—SQCAEM910JATME	91	150	5%	M	2.25	2.00	1.50	1.25	1.00
581—SQCAEA101JATME	100	150	5%	A	2.25	2.00	1.50	1.25	1.00
581—SQCA5A102JATME	1000	50	5%	A	2.84	2.52	1.89	1.58	1.26

These characteristics lend well to applications requiring:

### Specifications:

- High current carrying capabilities
- High quality factors
- Very low equivalent series resistance
- Very high series resonance
- Excellent stability under stresses of changing voltage, frequency, time and temperature
- Temperature Coefficient: (M) +90 ±20PPM°C, (A) ±30PPM°C

### Style SQCB

For quantities of 2000 and up, call for quote.

MOUSER STOCK NO.	Value (pF)	Volt	Tol. (pF)	Temp Coef.	Price Each				
					1	50	100	500	1000
581—SQCB7M1R0BATME	1.0	500	0.1pF	M	1.22	1.12	1.02	.92	.82
581—SQCB7M2R7BATME	2.7	500	0.1pF	M	1.22	1.12	1.02	.92	.82
581—SQCB7M3R9BATME	3.9	500	0.1pF	M	1.22	1.12	1.02	.92	.82
581—SQCB7M4R7BATME	4.7	500	0.1pF	M	1.22	1.12	1.02	.92	.82
581—SQCB7M5R6BATME	5.6	500	0.1pF	M	1.22	1.12	1.02	.92	.82
581—SQCB7M6R8BATME	6.8	500	0.1pF	M	1.90	1.74	1.58	1.42	1.26
581—SQCB7M8R2BATME	8.2	500	0.1pF	M	1.90	1.74	1.58	1.42	1.26
581—SQCB7M100JATME	10	500	5%	M	1.25	1.14	1.04	.94	.83
581—SQCB7M200JATME	20	500	5%	M	1.25	1.14	1.04	.94	.83
581—SQCB7M270JATME	27	500	5%	M	1.25	1.14	1.04	.94	.83
581—SQCB7M470JATME	47	500	5%	M	1.25	1.14	1.04	.94	.83
581—SQCB7M560JATME	56	500	5%	M	1.25	1.14	1.04	.94	.83
581—SQCB7M680JATME	68	500	5%	M	1.25	1.14	1.04	.94	.83
581—SQCB7M820JATME	82	500	5%	M	1.25	1.14	1.04	.94	.83
581—SQCB7M101JATME	100	500	5%	M	1.25	1.14	1.04	.94	.83
581—SQCB2M391JATME	390	200	5%	M	1.25	1.14	1.04	.94	.83
581—SQCB2M471JATME	470	200	5%	M	1.25	1.14	1.04	.94	.83

## AVX AQ SERIES

These porcelain and ceramic dielectric multilayer capacitor (MLC) chips are best suited for RF/Microwave applications typically ranging from 10MHz to 4.2GHz. Characteristic is a fine grained, high density, high purity dielectric material impervious to moisture with heavy internal palladium electrodes.

These characteristics lend well to applications requiring:

### Specifications:

- High current carrying capabilities
- High quality factors
- Very low equivalent series resistance
- Very high series resonance
- Excellent stability under stresses of changing voltage, frequency, time and temperature
- Temperature Coefficient: (M) +90 ±20PPM°C, (A) ±30PPM°C

### Style AQ12

For quantities of 2000 and up, call for quote.

MOUSER STOCK NO.	Value (pF)	Volt	Tol. ±	Temp Coef.	Price Each				
					1	50	100	500	1000
581—AQ12EM0R5BATME	0.5	150	0.1pF	M	1.23	.98	.86	.78	.74
581—AQ12EM0R8BATME	0.8	150	0.1pF	M	3.92	3.43	2.94	1.96	1.72
581—AQ12EM1R0BATME	1.0	150	0.1pF	M	1.23	.98	.86	.78	.74
581—AQ12EM1R2BATME	1.2	150	0.1pF	M	3.92	3.43	2.94	1.96	1.72
581—AQ12EM1R5BATME	1.5	150	0.1pF	M	1.72	1.59	1.47	1.35	1.23
581—AQ12EM1R8BATME	1.8	150	0.1pF	M	1.72	1.59	1.47	1.35	1.23
581—AQ12EA1R8BATME	1.8	150	0.1pF	A	1.47	1.23	1.10	.98	.88
581—AQ12EM2R0BATME	2.0	150	0.1pF	M	1.47	1.23	1.10	.98	.88
581—AQ12EM2R2BATME	2.2	150	0.1pF	M	1.72	1.59	1.47	1.35	1.23
581—AQ12EM2R2DATME	2.2	150	0.5pF	M	2.23	1.86	1.48	1.11	.74
581—AQ12EM2R7BATME	2.7	150	0.1pF	M	1.72	1.59	1.47	1.35	1.23
581—AQ12EM3R3BATME	3.3	150	0.1pF	M	1.72	1.59	1.47	1.35	1.23
581—AQ12EM3R9BATME	3.9	150	0.1pF	M	1.72	1.59	1.47	1.35	1.23
581—AQ12EM4R7BATME	4.7	150	0.1pF	M	1.23	.98	.86	.78	.74
581—AQ12EM5R1BATME	5.1	150	0.1pF	M	3.92	3.43	2.94	1.96	1.72
581—AQ12EM5R6BATME	5.6	150	0.1pF	M	1.72	1.59	1.47	1.35	1.23
581—AQ12EM6R8BATME	6.8	150	0.1pF	M	2.63	2.44	2.25	2.06	1.88
581—AQ12EM7R5CATME	7.5	150	0.25pF	M	1.83	1.53	1.37	1.22	1.10
581—AQ12EA8R2BATME	8.2	150	0.1pF	A	6.00	5.25	4.50	3.00	2.63
581—AQ12EM100JATME	10	150	5%	M	1.25	1.00	.88	.80	.75
581—AQ12EM100GATME	10	150	2%	M	4.14	3.45	2.76	2.07	1.38
581—AQ12EM120JATME	12	150	5%	M	1.50	1.25	1.13	1.00	.90
581—AQ12EM150JATME	15	150	5%	M	1.75	1.63	1.50	1.38	1.25
581—AQ12EM270JATME	27	150	5%	M	1.75	1.63	1.50	1.38	1.25
581—AQ12EM330JATME	33	150	5%	M	1.25	1.00	.88	.80	.75
581—AQ12EM390JATME	39	150	5%	M	1.25	1.00	.88	.80	.75
581—AQ12EM470JATME	47	150	5%	M	1.75	1.63	1.50	1.38	1.25
581—AQ12EM560JATME	56	150	5%	M	1.75	1.63	1.50	1.38	1.25
581—AQ12EM680JATME	68	150	5%	M	1.75	1.63	1.50	1.38	1.25
581—AQ12EM820JATME	82	150	5%	M	1.75	1.63	1.50	1.38	1.25
581—AQ12EM101JATME	100	150	2%	M	4.14	3.45	2.76	2.07	1.38
581—AQ125A102KATME	1000	50	10%	A	3.60	3.15	2.70	1.80	1.58
581—AQ125A102JATME	1000	50	5%	A	1.89	1.58	1.42	1.26	1.13

### Style AQ14

For quantities of 2000 and up, call for quote.

MOUSER STOCK NO.	Value (pF)	Volt	Tol. ±	Temp Coef.	Price Each				
					1	50	100	500	1000
581—AQ147M0R1BATME	0.1	500	0.1pF	M	1.22	1.02	.92	.82	.73
581—AQ147M0R2BATME	0.2	500	0.1pF	M	1.72	1.59	1.47	1.35	1.23
581—AQ147M0R3BATME	0.3	500	0.1pF	M	1.22	1.02	.92	.82	.73
581—AQ147M0R4BATME	0.4	500	0.1pF	M	1.22	1.02	.92	.82	.73
581—AQ147M0R5BATME	0.5	500	0.1pF	M	1.22	1.02	.92	.82	.73
581—AQ147M0R6BATME	0.6	500	0.1pF	M	1.72	1.59	1.47	1.35	1.23
581—AQ147M0R7BATME	0.7	500	0.1pF	M	1.22	1.02	.92	.82	.73
581—AQ147M0R8BATME	0.8	500	0.1pF	M	1.22	1.02	.92	.82	.73
581—AQ147M0R9BATME	0.9	500	0.1pF	M	1.72	1.59	1.47	1.35	1.23
581—AQ147M1R0BATME	1.0	500	0.1pF	M	1.43	1.33	1.22	1.12	1.02
581—AQ147M1R1BATME	1.1	500	0.1pF	M	1.22	1.02	.92	.82	.73
581—AQ147M1R2BATME	1.2	500	0.1pF	M	1.22	1.02	.92	.82	.73
581—AQ147M1R3BATME	1.3	500	0.1pF	M	1.22	1.02	.92	.82	.73
581—AQ147M2R7BATME	2.7	500	0.1pF	M	1.43	1.33	1.22	1.12	1.02
581—AQ147M3R9BATME	3.9	500	0.1pF	M	1.43	1.33	1.22	1.12	1.02
581—AQ147M4R7BATME	4.7	500	0.1pF	M	1.43	1.33	1.22	1.12	1.02
581—AQ147M5R6BATME	5.6	500	0.1pF	M	1.43	1.33	1.22	1.12	1.02
581—AQ147M6R8BATME	6.8	500	0.1pF	M	2.21	2.05	1.90	1.74	1.58
581—AQ147M8R2BATME	8.2	500	0.1pF	M	2.21	2.05	1.90	1.74	1.58
581—AQ147M100JATME	10	500	5%	M	1.46	1.35	1.25	1.14	1.04
581—AQ147M100FATME	10	500	1%	M	2.16	1.80	1.62	1.44	1.30
581—AQ147M110GATME	11	500	2%	M	1.75	1.46	1.31	1.17	1.05
581—AQ147M150FATME	15	500	1%	M	4.32	3.60	2.88	2.16	1.44
581—AQ147M200JATME	20	500	5%	M	1.46	1.35	1.25	1.14	1.04
581—AQ147M270JATME	27	500	5%	M	1.46	1.35	1.25	1.14	1.04
581—AQ147M470JATME	47	500	5%	M	1.46	1.35	1.25	1.14	1.04
581—AQ147A470JATME	47	500	5%	A	1.25	1.04	.94	.83	.75
581—AQ147A510JATME	51	500	5%	A	1.25	1.04	.94	.83	.75
581—AQ147M560JATME	56	500							