

Aluminum Electrolytic Capacitors Surface Mount AEC-Q200

SRB-A series

MERITEK

FEATURE

- General Purpose Series
- AEC-Q200 Compliant
- Applications: Suitable for AV (TV, Video, Audio), Monitor/Computer, Home Appliance, OA/HA/Communication, Industrial, Automobile, Meter.
- Load Life at 85°C



Diameter (mm)	Load Life (Hours)
4.0 ~ 10.0	2000



SPECIFICATIONS

Item	Characteristic										
Operating Temperature	-55 ~ 85°C										
Rated Working Voltage	4 ~ 100VDC										
Nominal Capacitance	1 ~ 1500 μ F, \pm 20% (at 20°C, 120HZ)										
Leakage Current	$I_L \leq 0.01CV$ or 3 μ A whichever is greater after 2 minutes at 20°C										
Ripple Current Coefficient, Frequency	Frequency (Hz)	60	120	1K	10K	--	--	--	--	--	
	Coefficient	0.80	1.00	1.15	1.25	--	--	--	--	--	
Dissipation Factor at 20°C, 120Hz	Working Voltage (V)	4	6.3	10	16	25	35	50	63	100	
	Dissipation Factor	0.35	0.26	0.20	0.16	0.14	0.12	0.12	0.12	0.10	
Low Temperature Stability, Impedance Ratio at 120Hz	Working Voltage (V)	4	6.3	10	16	25	35	50	63	100	
	Z-25°C / Z+20°C	7	4	3	2	2	2	2	2	2	
	Z-40°C / Z+20°C	15	8	6	4	4	3	3	3	3	
Load Life	Capacitance	$\leq \pm 20\%$ of initial value								Apply Working Voltage for Rated Load Life / Temperature Stabilized at +20°C.	
	Dissipation Factor	$\leq 200\%$ of initial value									
	Leakage Current	\leq Initial specified value									
Shelf Life	Capacitance	$\leq \pm 20\%$ of initial value								After storage condition without voltage applied for 1000 hours at Rated Temperature, Stabilizing for 1 to 2 hours.	
	Dissipation Factor	$\leq 200\%$ of initial value									
	Leakage Current	\leq Initial specified value									
Resistance to Soldering Heat	Capacitance	$\leq \pm 20\%$ of initial value								For other procedures than those specified, Soldering iron method: Temperature: 260 \pm 5°C. Application time of soldering iron: 10 sec	
	Dissipation Factor	\leq specified value									
	Leakage Current	\leq specified value									

Aluminum Electrolytic Capacitors Surface Mount AEC-Q200

SRB-A series

MERITEK

STANDARD RATING

Rated Voltage	Rated Capacitance		Case Size	Tan δ	Ripple Current	
	(V _{DC})	(μ F)				Code
4		33	330	4x5.4	0.35	26
		47	470	4x5.4	0.35	34
		100	101	5x5.4	0.35	61
		220	221	6.3x5.4	0.35	82
		330	331	6.3x5.4	0.35	80
		470	471	6.3x7.7	0.35	200
6.3		22	220	4x5.4	0.26	20
		33	330	4x5.4	0.26	22
		47	470	4x5.4	0.26	36
				5x5.4	0.26	46
		100	101	5x5.4	0.26	47
				6.3x5.4	0.26	71
				6.3x7.7	0.26	143
		220	221	6.3x5.4	0.26	74
				6.3x7.7	0.26	235
		330	331	6.3x7.7	0.26	280
				8x6.2	0.26	280
		470	471	8x6.2	0.26	312
				8x10.2	0.26	380
		1000	102	8x10.2	0.26	500
			10x10.2	0.26	700	
	1500	152	10x10.2	0.26	750	
10		10	100	4x5.4	0.20	20
		22	220	4x5.4	0.20	28
				5x5.4	0.20	40
		33	330	4x5.4	0.20	29
				5x5.4	0.20	43
		47	470	5x5.4	0.20	43
				6.3x5.4	0.20	66
		100	101	5x5.4	0.20	43
				6.3x5.4	0.20	70
		150	151	6.3x5.4	0.20	86
				6.3x5.4	0.20	110
		220	221	6.3x7.7	0.20	250
				8x6.2	0.20	250
		330	331	8x10.2	0.20	330
		470	471	8x10.2	0.20	390
				10x10.2	0.20	400
	680	681	8x10.2	0.20	420	
	1000	102	10x10.2	0.20	580	

Note: Ripple Current measured at 120Hz, 85°C

Rated Voltage	Rated Capacitance		Case Size	Tan δ	Ripple Current	
	(V _{DC})	(μ F)				Code
16		1.0	1R0	4x5.4	0.16	10
		4.7	4R7	4x5.4	0.16	20
		10	100	4x5.4	0.16	28
				5x5.4	0.16	28
		22	220	4x5.4	0.16	28
				5x5.4	0.16	39
		33	330	4x5.4	0.16	30
				5x5.4	0.16	45
				6.3x5.4	0.16	66
		47	470	5x5.4	0.16	45
				6.3x5.4	0.16	70
				8x6.2	0.16	85
		100	101	6.3x5.4	0.16	70
				6.3x7.7	0.16	85
				8x6.2	0.16	140
		220	221	6.3x7.7	0.16	162
				8x10.2	0.16	280
	25		330	331	8x10.2	0.16
				10x10.2	0.16	380
		470	471	8x10.2	0.16	350
				10x10.2	0.16	420
		680	681	10x10.2	0.16	500
		4.7	4R7	4x5.4	0.14	22
		10	100	4x5.4	0.14	24
				5x5.4	0.14	28
				6.3x5.4	0.14	28
		22	220	5x5.4	0.14	35
				6.3x5.4	0.14	55
		33	330	5x5.4	0.14	42
				6.3x5.4	0.14	65
		47	470	6.3x5.4	0.14	70
			6.3x7.7	0.14	96	
			8x6.2	0.14	100	
	100	101	6.3x5.4	0.14	80	
			6.3x7.7	0.14	143	
			8x6.2	0.14	143	
			8x10.2	0.14	180	
	180	181	8x10.2	0.14	210	
	220	221	8x10.2	0.14	230	
			10x10.2	0.14	310	
	330	331	8x10.2	0.14	270	
			10x10.2	0.14	340	
	470	471	10x10.2	0.14	380	

Aluminum Electrolytic Capacitors Surface Mount AEC-Q200

SRB-A series

MERITEK

STANDARD RATING

Rated Voltage (V _{DC})	Rated Capacitance		Case Size (mm)	Tan δ (%)	Ripple Current (mA/rms)
	(μF)	Code			
35	2.2	2R2	4x5.4	0.12	8
	3.3	3R3	4x5.4	0.12	10
			5x5.4	0.12	11
	4.7	4R7	4x5.4	0.12	22
	10	100	4x5.4	0.12	24
			5x5.4	0.12	30
	22	220	5x5.4	0.12	36
			6.3x5.4	0.12	60
	33	330	6.3x5.4	0.12	60
			6.3x7.7	0.12	130
	47	470	6.3x5.4	0.12	70
			6.3x7.7	0.12	165
			8x6.2	0.12	165
	100	101	6.3x7.7	0.12	140
8x10.2			0.12	180	
10x10.2			0.12	210	
220	221	8x10.2	0.12	200	
		10x10.2	0.12	310	
150	151	8x10.2	0.12	180	
330	331	10x10.2	0.12	350	
50	1	1R0	4x5.4	0.12	10
	2.2	2R2	4x5.4	0.12	16
	3.3	3R3	4x5.4	0.12	16
	4.7	4R7	4x5.4	0.12	18
			5x5.4	0.12	23
	10	100	5x5.4	0.12	27
			6.3x5.4	0.12	36
	22	220	6.3x5.4	0.12	40
			6.3x7.7	0.12	90
	33	330	6.3x7.7	0.12	90

Note: Ripple Current measured at 120Hz, 85°C

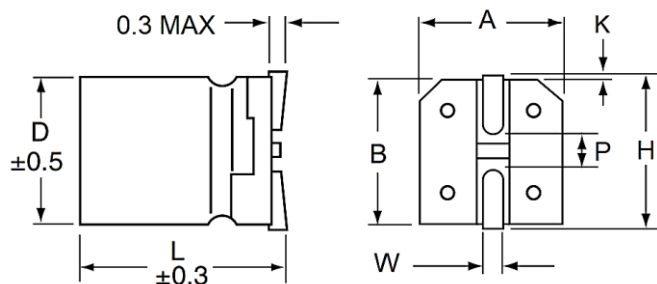
Rated Voltage (V _{DC})	Rated Capacitance		Case Size (mm)	Tan δ (%)	Ripple Current (mA/rms)
	(μF)	Code			
50	33	330	8x6.2	0.12	130
			8x10.2	0.12	150
	47	470	6.3x7.7	0.12	90
			8x6.2	0.12	100
			8x10.2	0.12	190
	56	56	8x10.2	0.12	130
	100	101	8x10.2	0.12	200
			10x10.2	0.12	310
	220	221	10x10.2	0.12	460
	63	4.7	4R7	5x5.4	0.12
6.3x5.4				0.12	20
10		100	6.3x5.4	0.12	20
			6.3x7.7	0.12	40
22		220	8x6.2	0.12	95
			8x10.2	0.12	120
33		330	8x10.2	0.12	140
47		470	8x10.2	0.12	170
			10x10.2	0.12	190
100		101	10x10.2	0.12	280
100	3.3	3R3	6.3x7.7	0.10	50
	4.7	4R7	6.3x5.4	0.10	40
			6.3x7.7	0.10	50
			8x10.2	0.10	60
	10	100	6.3x7.7	0.10	50
			8x10.2	0.10	85
	22	220	8x10.2	0.10	125
			10x10.2	0.10	150
	33	330	10x10.2	0.10	180
	47	470	10x10.2	0.10	210

Aluminum Electrolytic Capacitors Surface Mount AEC-Q200

SRB-A series

MERITEK

DIMENSION



Unit: mm

D	L	A ±0.2	B Max	H Max	W	P ±0.2	K
4.0 (D)	5.4	4.3	5.0	5.5	0.65±0.1	1.0	0.35+0.15/-0.2
5.0 (E)	5.4	5.3	6.0	6.5	0.65±0.1	1.5	0.35+0.15/-0.2
6.3 (F)	5.4	6.6	7.3	7.8	0.65±0.1	2.1	0.35+0.15/-0.2
6.3 (F)	7.7	6.6	7.3	7.8	0.65±0.1	2.1	0.35+0.15/-0.2
8.0 (H)	6.2	8.3	9.0	9.5	0.65±0.1	2.2	0.35+0.15/-0.2
8.0 (H)	10.2	8.3	9.1	10.0	0.90±0.2	3.1	0.70±0.20
10.0 (J)	10.2	10.3	11.1	12.0	0.90±0.2	4.6	0.70±0.20

PART NUMBERING SYSTEM

SRB 2A 470 A J102
(1) (2) (3) (4) (5)

No	Item	Code	Description
(1)	Product Code	SRB	Aluminum Electrolytic Capacitors, SMD type, 2000 Hrs 85°C
(2)	Rated Voltage	2A	100VDC DC Voltage Code
(3)	Capacitance	470	47µF ±20% (M) First two digits: significant, Third: Multiplier
(4)	Series Code	A	AEC-Q200 Compliant Series
(5)	Size Code	J102	10x10.2mm DxL (mm)

Voltage	4	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	500
Code	0G	0J	1A	1C	1E	1V	1H	1J	2A	2C	2D	2E	2V	2G	2W	2H

Diameter	4	5	6.3	8	10	12.5	14.5	16	18	20	22	25
Code	D	E	F	H	J	K	U	L	M	N	P	Q

*Specifications subject to change without notice.