

Aluminum Electrolytic Capacitors Surface Mount AEC-Q200

SRE-A series

MERITEK

FEATURE

- Ultra Low Impedance Series
- Applications : TV Audio/Video Media, Monitor/Computer, Communication Power Industry, Electricity Meter, Automotive Application
- AEC-Q200 Compliant
- Load Life at 105°C



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



SPECIFICATIONS

Item	Characteristic						
Operating Temperature	-55 ~ 105°C						
Rated Working Voltage	6.3 ~ 50VDC						
Nominal Capacitance	4.7 ~ 1500μF, ±20% (at 20°C, 120HZ)						
Leakage Current	$I_L \leq 0.01CV$ or $3\mu A$ whichever is greater after 2 minutes at 20°C I _L : Leakage Current (μA) C: Nominal Capacitance (μF) V: Rated Voltage (V)						
Ripple Current Coefficient, Frequency	Frequency (Hz)	120	1K	10K	100K	--	--
	Coefficient	0.70	0.80	0.90	1.00	--	--
Dissipation Factor at 20°C, 120Hz	Working Voltage (V)	6.3	10	16	25	35	50
	Dissipation Factor	0.26	0.19	0.16	0.14	0.12	0.12
Low Temperature Stability, Impedance Ratio at 120Hz	Working Voltage (V)	6.3	10	16	25	35	50
	Z-25°C / Z+20°C	2	2	2	2	2	2
	Z-40°C / Z+20°C	3	3	3	3	3	3
Load Life	Capacitance	≤ ±30% of initial value		Apply Working Voltage for Rated Load Life / Temperature Stabilized at +20°C.			
	Dissipation Factor	≤ 200% of initial value					
	Leakage Current	≤ Initial specified value					
Shelf Life	Capacitance	≤ ±30% of initial value		After storage condition without voltage applied for 1000 hours at Rated Temperature, Stabilizing for 1 to 2 hours.			
	Dissipation Factor	≤ 200% of initial value					
	Leakage Current	≤ Initial specified value					
Resistance to Soldering Heat	Capacitance	≤ ±20% of initial value		For other procedures than those specified, Soldering iron method: Temperature: 260±5°C. Application time of soldering iron: 10 sec			
	Dissipation Factor	≤ specified value					
	Leakage Current	≤ specified value					

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STANDARD RATING

Rated Voltage	Rated Cap	Case Size	DF Tan δ	Ripple Current	Max Impedance
(V _{DC})	(μF)	(mm)	(%)	(mA/rms)	(Ω)
6.3	22	4x5.4	0.26	90	1.80
	33	4x5.4	0.26	90	1.80
	47	4x5.4	0.26	90	1.80
	47	5x5.4	0.26	160	0.76
	100	5x5.4	0.26	160	0.76
	100	6.3x5.4	0.26	240	0.44
	150	6.3x5.4	0.26	240	0.44
	150	6.3x7.7	0.26	240	0.34
	220	6.3x5.4	0.26	240	0.44
	220	6.3x7.7	0.26	240	0.34
	220	8x6.2	0.26	240	0.34
	330	6.3x7.7	0.26	280	0.34
	330	8x6.2	0.26	290	0.34
	470	8x10.2	0.26	600	0.16
	680	8x10.2	0.26	600	0.16
	1000	8x10.2	0.26	600	0.16
1500	10x10.2	0.26	850	0.08	
10	22	4x5.4	0.19	90	1.80
	33	4x5.4	0.19	90	1.80
	33	5x5.4	0.19	160	0.76
	47	6.3x5.4	0.19	190	0.44
	100	6.3x5.4	0.19	190	0.44
	150	6.3x5.4	0.19	200	0.44
	150	6.3x7.7	0.19	240	0.34
	220	6.3x7.7	0.19	280	0.34
	220	8x6.2	0.19	280	0.34
	330	8x10.2	0.19	600	0.16
	470	8x10.2	0.19	600	0.16
	680	10x10.2	0.19	600	0.09
	820	10x10.2	0.19	850	0.08
	1000	10x10.2	0.19	850	0.08
1200	10x10.2	0.19	850	0.08	
16	3.3	4x5.4	0.16	60	1.80
	10	4x5.4	0.16	90	1.80
	22	4x5.4	0.16	90	1.80
	22	5x5.4	0.16	160	0.76
	33	5x5.4	0.16	160	1.00
	47	5x5.4	0.16	160	1.00
	47	6.3x5.4	0.16	240	0.44
	68	6.3x5.4	0.16	240	0.44
	100	6.3x5.4	0.16	240	0.44
	100	6.3x7.7	0.16	280	0.34
	150	6.3x7.7	0.16	280	0.34
	220	6.3x7.7	0.16	280	0.34
	220	8x6.2	0.16	280	0.34
	220	8x6.2	0.16	280	0.34

Rated Voltage	Rated Cap	Case Size	DF Tan δ	Ripple Current	Max Impedance
(V _{DC})	(μF)	(mm)	(%)	(mA/rms)	(Ω)
16	220	8x10.2	0.16	370	0.16
	330	8x10.2	0.16	600	0.16
	470	8x10.2	0.16	600	0.16
	470	10x10.2	0.16	650	0.09
	560	10x10.2	0.16	650	0.09
	680	10x10.2	0.16	850	0.08
	25	10	4x5.4	0.14	90
10		5x5.4	0.14	95	1.80
22		5x5.4	0.14	160	0.76
33		5x5.4	0.14	160	1.00
33		6.3x5.4	0.14	240	0.52
47		6.3x5.4	0.14	240	0.44
47		6.3x7.7	0.14	260	0.44
68		6.3x5.4	0.14	240	0.34
100		6.3x7.7	0.14	280	0.34
100		8x6.2	0.14	280	0.34
150		8x10.2	0.14	600	0.16
220		8x10.2	0.14	600	0.16
330		8x10.2	0.14	600	0.16
470		10x10.2	0.14	850	0.08
35	4.7	4x5.4	0.12	90	1.80
	10	4x5.4	0.12	90	1.80
	10	5x5.4	0.12	160	0.76
	22	5x5.4	0.12	160	0.76
	22	6.3x5.4	0.12	200	0.76
	33	6.3x5.4	0.12	240	0.52
	47	6.3x5.4	0.12	240	0.44
	47	6.3x7.7	0.12	280	0.34
	68	6.3x7.7	0.12	280	0.34
	100	6.3x7.7	0.12	280	0.34
	100	8x10.2	0.12	600	0.16
	150	8x10.2	0.12	600	0.16
	220	8x10.2	0.12	600	0.16
	330	10x10.2	0.12	850	0.08
50	10	5x5.4	0.12	120	1.52
	10	6.3x5.4	0.12	165	0.88
	22	6.3x5.4	0.12	165	0.88
	33	6.3x7.7	0.12	185	0.68
	47	6.3x7.7	0.12	185	0.68
	47	8x6.2	0.12	185	0.68
	100	8x10.2	0.12	300	0.34
	100	10x10.2	0.12	670	0.18
	150	10x10.2	0.12	670	0.18
	220	10x10.2	0.12	670	0.18

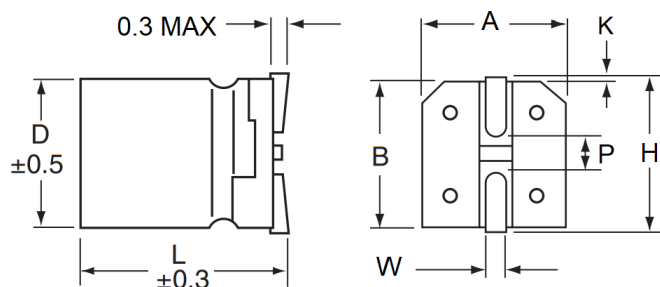
Note: Ripple Current measured at 105°C/100KHz, Impedance at 20°C/100KHz

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DIMENSION



Unit: mm

D	L	A ±0.2	B ±0.2	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

SRE (1) **1H** (2) **221** (3) **A** (4) **J102** (5)

No	Item	Code	Description
(1)	Product Code	SRE	Aluminum Electrolytic Capacitors, SMD type, 2000 Hrs 105°C
(2)	Rated Voltage	1H	50VDC DC Voltage Code
(3)	Capacitance	221	220µF ±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.