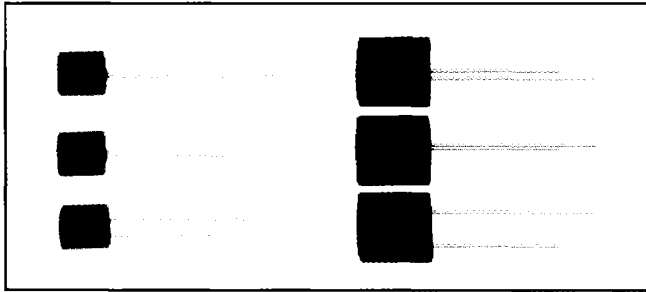


OS-CON[®] TYPE 94SA

Solid Aluminum Capacitors

With Organic Semiconductor Electrolyte

A COMPANY OF
VISHAY



FEATURES

- High Capacitance
- Miniaturized
- Suitable for high frequency switching power supplies

STANDARD RATINGS

CASE CODE	PART* NUMBER	RATED VOLTAGE (V)	NOMINAL CAPACITANCE (μF)	MAX. DF (%)	MAX. LEAKAGE CURRENT (μA)	MAX. ESR 100kHz - 300kHz (Ω)
C	94SA156X0020C__	20.0	15.0	0.06	6.0	0.125
	94SA226X0020C__	20.0	22.0	0.06	8.8	0.125
	94SA226X0016C__	16.0	22.0	0.06	7.0	0.125
	94SA336X0016C__	16.0	33.0	0.06	10.6	0.125
	94SA336X0010C__	10.0	33.0	0.07	6.6	0.125
	94SA476X06R3C__	6.3	47.0	0.07	5.9	0.125
D	94SA336X0020D__	20.0	33.0	0.06	13.2	0.090
	94SA476X0016D__	16.0	47.0	0.06	15.0	0.090
	94SA686X0010D__	10.0	68.0	0.07	13.6	0.090
E	94SA476X0020E__	20.0	47.0	0.06	18.8	0.045
	94SA686X0020E__	20.0	68.0	0.06	27.2	0.045
	94SA686X0016E__	16.0	68.0	0.06	21.8	0.045
	94SA107X0016E__	16.0	100.0	0.06	32.0	0.045
	94SA107X0010E__	10.0	100.0	0.07	20.0	0.045
	94SA157X06R3E__	6.3	150.0	0.07	18.9	0.043
F	94SA107X0020F__	20.0	100.0	0.06	40.0	0.037
	94SA157X0016F__	16.0	150.0	0.06	48.0	0.035
	94SA227X0010F__	10.0	220.0	0.07	44.0	0.035
	94SA337X06R3F__	6.3	330.0	0.07	41.5	0.030

* Part Numbers shown are for ± 20% capacitance tolerance. For ± 10%, change X0 to X9.

DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]

	CASE CODE	Ø D x L	F	Ø d
		C	.248 x .268 [6.3 x 6.8]	.098 [2.5]
	D	.248 x .386 [6.3 x 9.8]	.098 [2.5]	.020 [0.50]
	E	.315 x .413 [8.0 x 10.5]	.138 [3.5]	.020 [0.50]
	F	.394 x .413 [10.0 x 10.5]	.020 [5.0]	.020 [0.50]

OS-CON® TYPE 94SA

PERFORMANCE CHARACTERISTICS		
ITEMS	CHARACTERISTICS	
1. Operating Temperature Range	- 55°C to + 105°C	
2. Capacitance Tolerance @ 120Hz	X9 = ± 10%. X0 = ± 20%.	
3. Maximum Dissipation Factor @ 120Hz (%)	Values in Standard Ratings table	
4. Leakage Current (µA/2 minutes) (Maximum)	Values in Standard Ratings table	
5. Maximum Equivalent Series Resistance (Ω) (100kHz from - 25°C to + 35°C)	Values in Standard Ratings table	
6. Temperature Characteristics Maximum Impedance Change at 100kHz	- 55°C	+ 25% Max.
	+ 105°C	- 25% Max.
7. Life Test + 105°C, 2,000 hours (Ø D ≥ 8, 1,000 hours) Rated Voltage Applied (25WV - 20V applied)	Δc/c	Within ± 20% of the initial value
	DF	≤ 1.5 times the initial requirement
	DCL	Shall meet the original requirement
8. Moisture Resistance (+ 60°C, 90 - 95% RH, 1,000 hours, no voltage)	Δc/c	Within ± 20% of the initial value
	DF	≤ 2 times the value of Item 3
	DCL	≤ The value of Item 4
9. Reverse Voltage Guarantee	20% of the rated voltage	

ALLOWABLE RIPPLE CURRENT				
CASE CODE	PART* NUMBER	≤ + 45°C	+ 85°C	+ 105°C
		100kHz	100kHz	100kHz
C	94SA156X0020C__	1.200	0.840	0.300
	94SA226X0020C__	1.300	0.910	0.330
	94SA226X0016C__	1.300	0.910	0.330
	94SA336X0016C__	1.370	0.960	0.340
	94SA336X0010C__	1.370	0.960	0.340
	94SA476X06R3C__	1.430	1.000	0.360
D	94SA336X0020D__	1.710	1.200	0.430
	94SA476X0016D__	1.830	1.280	0.460
	94SA686X0010D__	2.000	1.400	0.500
E	94SA476X0020E__	2.450	1.720	0.610
	94SA686X0020E__	2.600	1.820	0.650
	94SA686X0016E__	2.600	1.820	0.650
	94SA107X0016E__	2.740	1.920	0.690
	94SA107X0010E__	2.670	1.870	0.670
	94SA157X06R3E__	2.780	1.950	0.700
F	94SA107X0020F__	3.210	2.250	0.800
	94SA157X0016F__	3.260	2.280	0.820
	94SA227X0010F__	3.370	2.360	0.840
	94SA337X06R3F__	3.500	2.450	0.870

* Part Numbers shown are for ± 20% capacitance tolerance. For ± 10%, change X0 to X9.

CASE CODE LIST				
CAPACITANCE (µF)	6.3 WVDC	10 WVDC	16 WVDC	20 WVDC
15.0	—	—	—	C
22.0	—	—	C	C
33.0	—	C	C	D
47.0	C	—	D	E
68.0	—	D	E	E
100.0	—	E	E	F
150.0	E	—	F	—
220.0	—	F	—	—
330.0	F	—	—	—

TEMPERATURE COEFFICIENT FOR RIPPLE CURRENT				
Ambient Temperature	- + 45°C	+ 85°C	+ 95°C	+ 105°C
Coefficient	4.0	2.8	1.6	1.0

PART MARKING**	
—	Polarity (Θ)
—	Rated voltage
—	Capacitance
—	OS-CON®
—	Lot number
—	Maximum operating temperature (+ 105°C)

** Sleeve color: Blue. Marking: White.