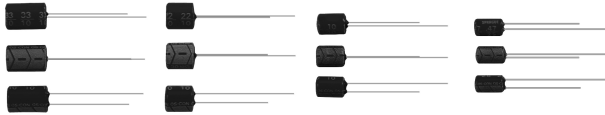


## Solid Aluminum Capacitors With Organic Semiconductor Electrolyte

### FEATURES



- Designed for general use.
- Superior high frequency characteristics.
- 94SC capacitors are suitable for use in noise limiters and switching power supplies.

STANDARD RATINGS							
CASE CODE	PART* NUMBER	RATED VOLTAGE (V)	NOMINAL CAPACITANCE (μF)	MAX. ALLOWABLE RIPPLE CURRENT (mArms) (@ 100kHz, + 45°C)	MAX. LEAKAGE CURRENT (μA) (After 2 Minutes)	MAX. TANGENT OF LOSS ANGLE	MAX. ESR 100k ~ 300kHz (mΩ)
A	94SC105X0030ABP	30.0	1.0	430	1.00	0.03	350
	94SC105X0025(16)ABP	25.0 (16.0)	1.0	430	0.50	0.03	350
	94SC155X0025(16)ABP	25.0 (16.0)	1.5	435	0.50	0.03	300
	94SC225X0016ABP	16.0	2.2	450	0.50	0.04	280
	94SC335X0016ABP	16.0	3.3	500	0.53	0.04	280
	94SC475X0010ABP	10.0	4.7	540	0.50	0.05	280
	94SC685X06R3ABP	6.3	6.8	560	0.50	0.05	250
B	94SC155X0030BBP	30.0	1.5	435	1.00	0.03	300
	94SC225X0030BBP	30.0	2.2	695	1.32	0.03	250
	94SC225X0025BBP	25.0	2.2	695	0.55	0.03	200
	94SC335X0025BBP	25.0	3.3	700	0.83	0.03	200
	94SC475X0016BBP	16.0	4.7	720	0.75	0.04	180
	94SC685X0016BBP	16.0	6.8	745	1.09	0.04	150
	94SC106X0010BBP	10.0	10.0	780	1.00	0.05	150
	94SC156X06R3BBP	6.3	15.0	815	0.95	0.05	120
C	94SC335X0030CBP	30.0	3.3	820	1.98	0.03	200
	94SC475X0025CBP	25.0	4.7	1130	1.18	0.03	100
	94SC685X0025CBP	25.0	6.8	1140	1.70	0.03	100
	94SC106X0025CBP	25.0	10.0	1150	2.50	0.03	90
	94SC106X0016CBP	16.0	10.0	1150	1.60	0.04	90
	94SC156X0016CBP	16.0	15.0	1230	2.40	0.04	90
	94SC226X0010CBP	10.0	22.0	1270	2.20	0.05	70
	94SC336X06R3CBP	6.3	33.0	1320	2.08	0.05	70
D	94SC475X0030DBP	30.0	4.7	1300	2.82	0.04	120
	94SC685X0030DBP	30.0	6.8	1340	4.08	0.04	120
	94SC156X0025DBP	25.0	15.0	1650	3.75	0.04	70
	94SC226X0016DBP	16.0	22.0	1800	3.52	0.05	70
	94SC336X0016DBP	16.0	33.0	1900	5.28	0.06	70
	94SC476X0010DBP	10.0	47.0	2020	4.70	0.06	60
E	94SC106X0030EBP	30.0	10.0	1380	6.00	0.06	110
	94SC226X0025EBP	25.0	22.0	2330	5.50	0.06	40
F	94SC336X0025FBP	25.0	33.0	2900	8.25	0.06	35
	94SC476X0025FBP	25.0	47.0	2980	11.75	0.06	35
	94SC226X0030FBP	30.0	22.0	1830	13.20	0.06	80

\*Part Numbers shown are for ± 20% capacitance tolerance (X0).

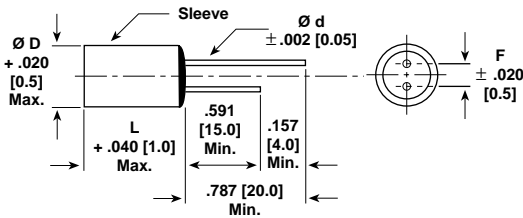
94SC106X0016\_ \_ \_ Part Number is complete with Case Code and 2 character Package or Process Code. BP as shown indicates Bulk Pack.

# Type 94SC

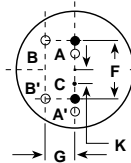
Vishay



## DIMENSIONS in inches (millimeters)



### Standards of Lead Position



Mark • = Ideal Lead Position  
C = The Middle Point of A-A'

CASE CODE	Ø D x L	F	Ø d	G (Max.)	K (Max.)
A	.157 x .268 [4.0 x 6.8]	.079 [2.0]	.018 [0.45]	.020 [0.5]	.020 [0.5]
B	.197 x .268 [5.0 x 6.8]	.079 [2.0]	.018 [0.45]	.020 [0.5]	.020 [0.5]
C	.248 x .268 [6.3 x 6.8]	.098 [2.5]	.018 [0.45]	.020 [0.5]	.020 [0.5]
D	.248 x .386 [6.3 x 9.8]	.098 [2.5]	.236 [6.0]	.020 [0.5]	.020 [0.5]
E	.315 x .413 [8.0 x 10.5]	.138 [3.5]	.236 [6.0]	.031 [0.8]	.031 [0.8]
F	.394 x .413 [10.0 x 10.5]	0.20 [5.0]	.236 [6.0]	.031 [0.8]	.031 [0.8]

ENVIRONMENTAL PERFORMANCE			
ITEMS	CHARACTERISTICS		
1. Operating Temperature Range	- 55°C ~ + 105°C		
2. Capacitance Tolerance @ 120Hz	X0 = ± 20%		
3. Tangent of Loss Angle (tan δ) @ 120Hz	≤ Values in Standard Ratings Table		
4. Leakage Current (µA/2 minutes) (or less)*	6.3 ~ 25 WV : 0.01 CV or 0.5 30 WV : 0.02 CV or 1.0 (Whichever is greater)		
5. Equivalent Series Resistance (Ω) (100k ~ 300kHz)	≤ Values in Standard Ratings Table		
6. Temperature Characteristics Impedance Ratio at 100kHz	- 55°C	Z/Z <sub>20°C</sub>	1.0 ~ 1.25
	+ 105°C	Z/Z <sub>20°C</sub>	0.75 ~ 1.0
7. High Temperature Load** + 105°C, 2,000 hours. Rated Voltage Applied (25 WV- 20V applied)	Δ C/C	Within ± 20% of the initial value	
	tan δ	≤ 1.5 times the value of Item 3	
	Leakage Current	≤ The value of Item 4	
8. Moisture Resistance (+ 60°C, 90 ~ 95% RH, 1,000 hours, no voltage)	Δ C/C	Within ± 10% of the initial value	
	tan δ	≤ 1.5 times the value of Item 3	
	Leakage Current	≤ The value of Item 4	
9. Reverse Voltage Guarantee	Temporary: Less than 20% of the rated voltage Continuous: Less than 10% of the rated voltage		

\*If any doubt arises, measure the current after applying voltage (voltage treatment) for 30 minutes at + 105°C. The rated voltage should be applied for 6.3 to 16.30 WV, while a temperature reduction voltage should be applied for 25 WV.

\*\*To use a Vishay OS-CON capacitor when the operating temperature exceeds + 85°C on a component with a rated voltage of 25V, reduce the voltage by 0.25V for every degree (1°C) relative to the value at + 85°C (25V).

CASE CODE LIST						
CAPACITANCE (µF)	WV***	6.3	10	16	25	30
	(SV)****	(7.3)	(11.5)	(18.4)	(25)	(34.5)
1.0	—	—	—	A	A	A
1.5	—	—	—	A	A	B
2.2	—	—	—	A	B	B
3.3	—	—	—	A	B	C
4.7	—	—	A	B	C	D
6.8	—	A	—	B	C	D
10.0	—	—	B	C	C	E
15.0	—	B	—	C	D	—
22.0	—	—	C	D	E	F
33.0	—	C	—	D	F	—
47.0	—	—	D	—	F	—

\*\*\*WV = Rated Voltage. \*\*\*\*(SV) = Surge Voltage (at room temperature).

TEMPERATURE COEFFICIENT FOR RIPPLE CURRENT				
Ambient Temperature	~ + 45°C	+ 85°C	+ 95°C	+ 105°C
Coefficient	1.0	0.7	0.4	0.25

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

\*\*\*\*\*Sleeve color: Blue. Marking: White.