

## Conductive Polymer Aluminum Solid Capacitors (OS-CON) -SMD type-



High voltage, Large capacity, Low ESR

### Product summary

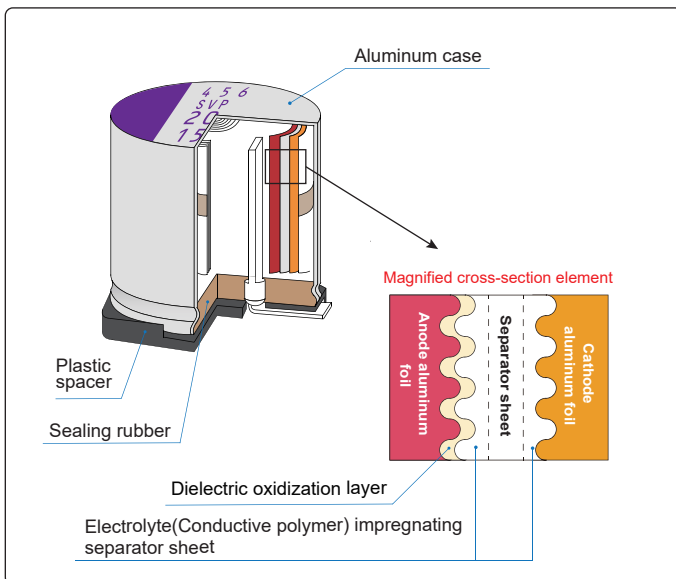
OS-CON is an aluminum solid capacitor with high conductive polymer as the electrolyte. This enabled OS-CON acquires low Equivalent Series Resistance (ESR), excellent noise reduction capability and frequency characteristics.

In addition, OS-CON has a long life span and its ESR has little change even at low temperatures since the electrolyte is solid.

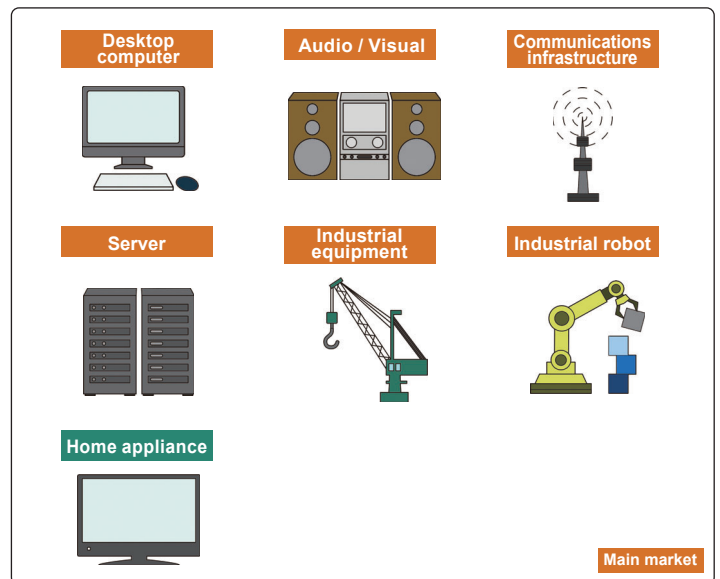
### Features

- Achieves low ESR characteristics by using a conductive polymer as the electrolyte
  - The impedance is an ideal frequency response, and it is ideal for coupling capacitors because it is used for noise rejection.
  - Capable of flowing a large amount of ripple current, it is ideal as a backup capacitor for smoothing switching power supplies and load fluctuations around the CPU.
  - Ideal as a backup capacitor in circuits that consume large currents at high speeds.
- High reliability and High voltage
  - We offer a maximum withstand voltage of 100 V and a guarantee of 1000 h at 125 °C, and we also have a lineup of highly reliable products suitable for industrial equipment.
- Excellent temperature characteristics
  - It maintains stable temperature characteristics with ESR up to -55 °C to 105 °C (some 125 °C), and is also suitable for equipment with low temperature (0 °C or less) specifications.

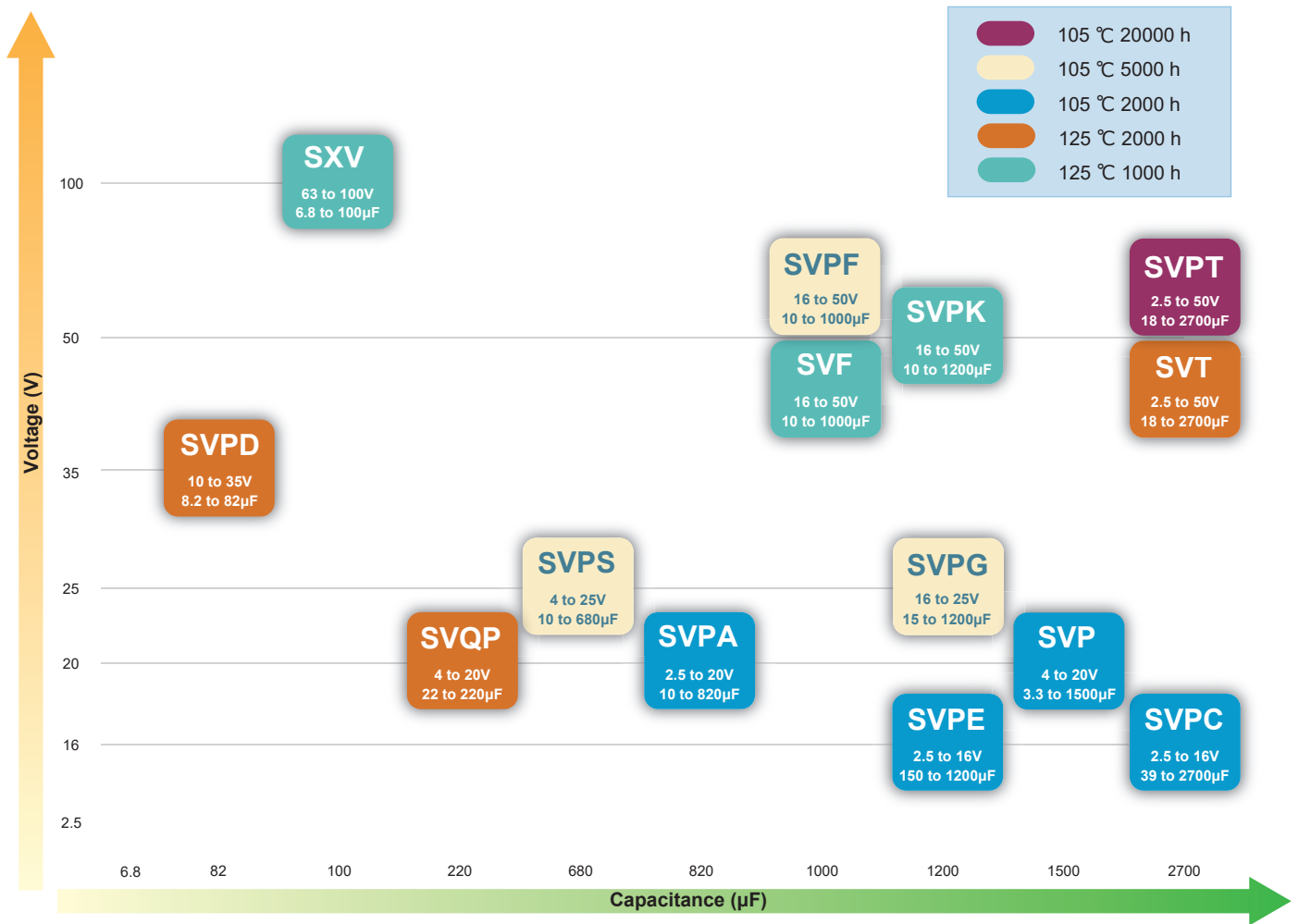
### Structure



### Applications



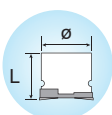
# Voltage vs Capacitance



## Characteristic

Series	SVT	SVPT	SVF	SVPK	SXV	SVPG	SVPF
Warranty life <sup>*1</sup>	125 °C 2000 h	105 °C 20000 h	125 °C 1000 h	125 °C 1000 h	125 °C 1000 h	105 °C 5000 h	105 °C 5000 h
Rated voltage (V)	2.5 to 50	2.5 to 50	16 to 50	16 to 50	63 to 100	16 to 25	16 to 50
Capacitance (µF)	18 to 2700	18 to 2700	10 to 1000	10 to 1200	6.8 to 100	15 to 1200	10 to 1000
ESR (mΩ) <sup>*2</sup>	10 to 35	10 to 35	14 to 40	12 to 80	25 to 60	6.5 to 30	12 to 40
Ripple current (Arms)	0.78 to 1.7 (at 125 °C)	2.49 to 5.4 (at 105 °C)	0.77 to 1.7 (at 125 °C)	0.55 to 1.7 (at 125 °C)	0.34 to 1.03 (at 125 °C)	2.8 to 7.5 (at 105 °C)	2.45 to 5.4 (at 105 °C)
DC leakage current (µA) <sup>*3</sup>	180 to 3200	180 to 3200	100 to 3200	100 to 3840	34 to 315	75 to 3840	100 to 3200
Damp heat	60 °C 90 to 95 % RH 1000 h						
Size code	C65/E7/E10/E12/F10/F12	C65/E7/E10/E12/F10/F12	B6/C6/E7/E12/F10/F12	B6/C6/E7/E12/F12	E7/E12/F8/F12	B45/B6/C6/C8/C10/C10L/E7/E10/E12/F10/F12	B6/C6/E7/E10/E12/F10/F12

Series	SVPA	SVPC	SVPD	SVPE	SVPS	SVQP	SVP
Warranty life <sup>*1</sup>	105 °C 2000 h	105 °C 2000 h	125 °C 2000 h	105 °C 2000 h	105 °C 5000 h	125 °C 2000 h	105 °C 2000 h
Rated voltage (V)	2.5 to 20	2.5 to 16	10 to 35	2.5 to 16	4.0 to 25	4.0 to 20	4.0 to 20
Capacitance (µF)	10 to 820	39 to 2700	8.2 to 82	150 to 1200	10 to 680	22 to 220	3.3 to 1500
ESR (mΩ) <sup>*2</sup>	19 to 40	9 to 35 <sup>*4</sup>	28 to 70	8 to 20 <sup>*4</sup>	20 to 220	35 to 60	12 to 260
Ripple current (Arms)	1.7 to 4.24 (at 105 °C)	1.82 to 5.38 (at 105 °C)	0.4 to 1.202 (at 125 °C)	2.7 to 6.1 (at 105 °C)	0.7 to 4.13 (at 105 °C)	0.459 to 0.81 (at 125 °C)	0.66 to 5.44 (at 105 °C)
DC leakage current (µA) <sup>*3</sup>	80 to 660	300 to 1350	50 to 410	500 to 1504	50 to 660	220 to 750	23.5 to 960
Damp heat	60 °C 90 to 95 % RH 1000 h		85 °C 85 to 90 % RH 1000 h	60 °C 90 to 95 % RH 1000 h			
Size code	B6/C6/E7/F8	B6/C6/E7/E12/F12	C6/E7/E12/F8/F12	B6/C6/C10/F12	A5/B6/C6/E7/F8	C6/E7	A5/B6/C6/E7/E12/F8/F12



Size list ø x L (mm)

A5	4.0 x 5.4	C6	6.3 x 5.9	C8	6.3 x 7.9	E7	8.0 x 6.9	F8	10.0 x 7.9
B45	5.0 x 4.4	C65	6.3 x 6.4	C10	6.3 x 9.9	E10	8.0 x 10.0	F10	10.0 x 10.0
B6	5.0 x 5.9			C10L	6.3 x 10.4	E12	8.0 x 11.9	F12	10.0 x 12.6

\*1: For details, please refer to the characteristics of each series.

\*2: ESR (100 kHz to 300 kHz / +20 °C)

\*3: After 2 minutes

\*4: 100 kHz / +20 °C