

# Conductive Polymer Solid capacitor OS-CON

## An ideal replacement for Aluminum Electrolytic capacitors

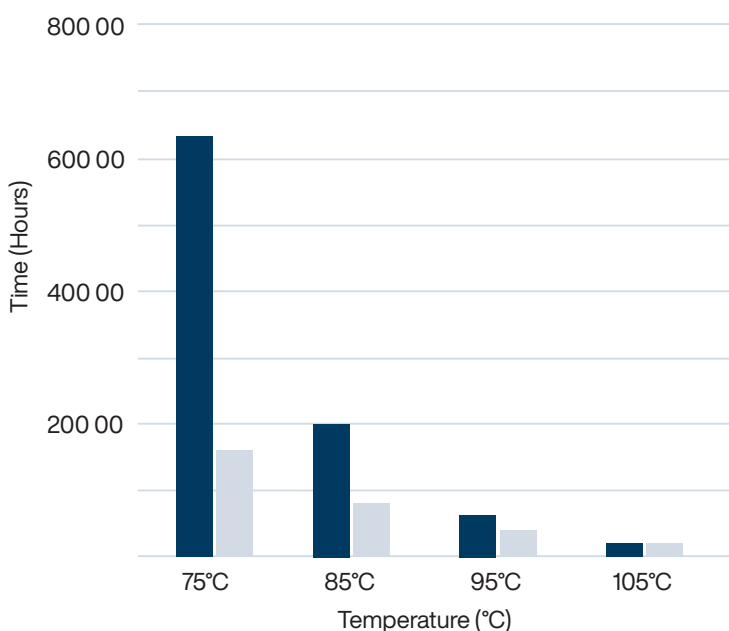
	E-CAP	OS-CON	EXAMPLE
Structure			
Electrolyte	Liquid	Polymer	<b>E-CAP</b> 6.3V / 220μF / 105°C / 2,000h / 6.3x5.8mm   360mΩ / ripple 0.240Arms
Size (mm)	Dia. 4~18 x 5.5~42	Dia. 4~10 x 4.5~13	 <b>Drop-in Replacement</b>
Capacitance (μF)	Up to 22,000	Up to 2,700	
Voltage (V)	4-450	2.5-100	<b>OS-CON</b> 6.3V / 220μF / 105°C / 2,000h / 6.3x6mm / ESR 27mΩ / ripple 2.32Arms
Ripple Current	Low	Very High	
ESR (20°C 100kHz)	Ok	Very Low	
Low temperature / High-frequency characteristics	Bad	Good	

### EXAMPLE COMPARISON

	E-CAP	OS-CON	Benefit
Lifetime (hours)	2,000	2,000	Better endurance due to different lifetime formula*
Ripple Current (A r.m.s)	0.24	2.32	10 times better Ripple Current
ESR (mΩ)	360	27	More than 13 times less ESR

\*OS-CON is an optimal replacement for electrolytic capacitors since they have longer lifespan

### Lifetime comparison of E-CAP 2,000 hours vs. OS-CON 2,000 hours



■ OS-CON ■ E-CAP

$L_x = L_o \times 10^{\frac{T_o - T_x}{20}}$

Lx: Capacitor's expected lifetime at Tx(H)  
Lo: Guaranteed lifetime(H)  
To: Guaranteed temperature(°C)  
Tx: Capacitor's temperature in actual use (°C)

**OS-CON** 20°C down > x10 lifetime  
Practical equation

**E-CAP** 10°C down > x2 lifetime  
Arrhenius equation

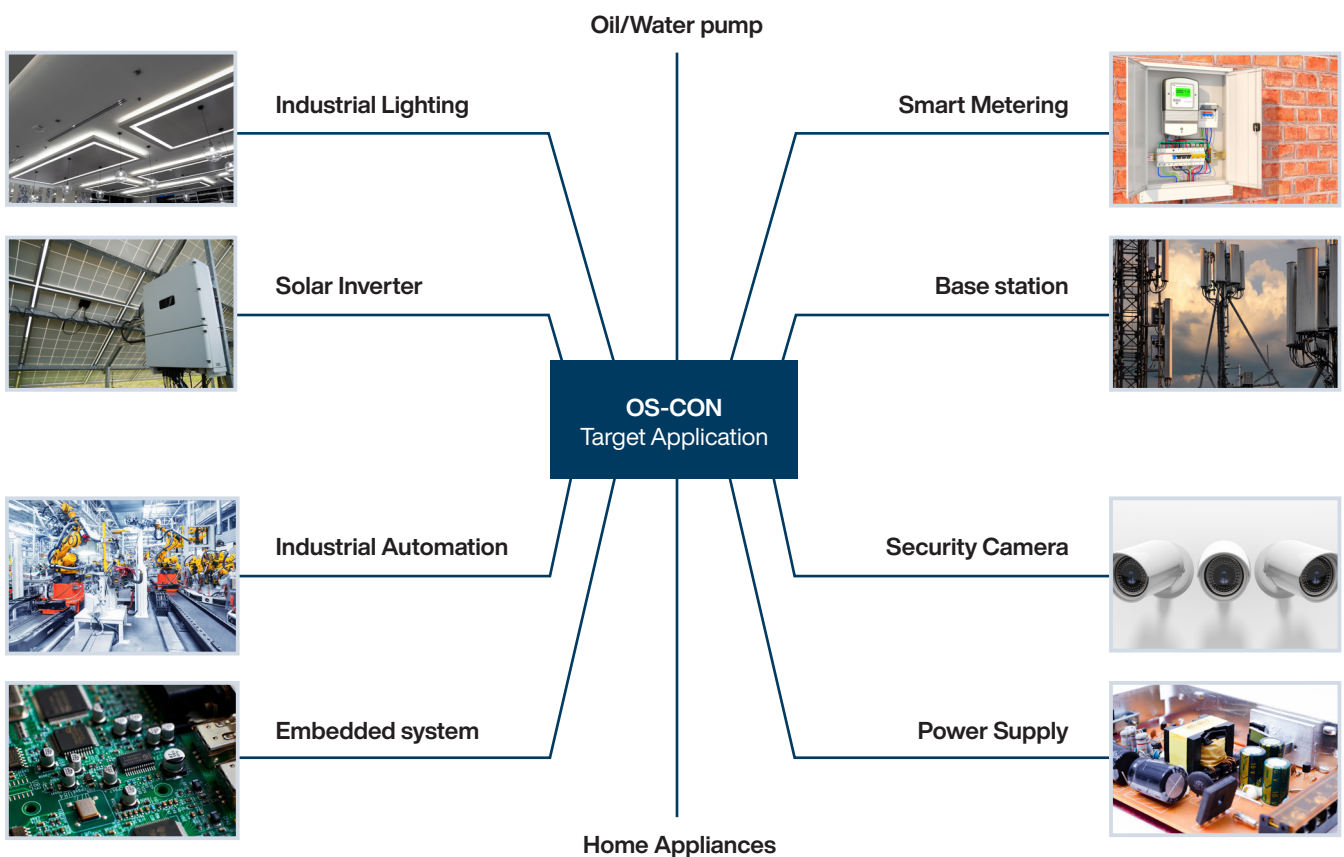
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## WHERE DO WE OFFER ALTERNATIVES:

- > Voltage up to 100V
- > Capacitance up to 2,700 $\mu$ F
- > Maintenance-free due to long life
- > Supports high ripple current
- > Stable Temperature Characteristic
- > Non-Automotive Application

## TARGET APPLICATIONS:



## CONTACT

For more information visit our website:  
[industry.panasonic.eu](http://industry.panasonic.eu)

Or contact us for technical support:  
[capacitor@eu.panasonic.com](mailto:capacitor@eu.panasonic.com)

