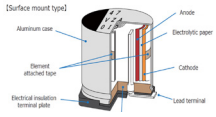
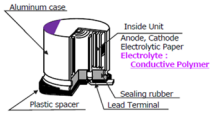
Panasonic INDUSTRY

Your Committed Enabler

Conductive Polymer Solid capacitor OS-CON

An ideal replacement for Aluminum Electrolytic capacitors

	E-CAP	OS-CON
Structure		
Electrolyte	Liquid	Polymer
Size (mm)	Dia. 4~18 x 5.5~42	Dia. 4~10 x 4.5~13
Capacitance (µF)	Up to 22,000	Up to 2,700
Voltage (V)	4-450	2.5-100
Ripple Current	Low	Very High
ESR (20℃ 100kHz)	Ok	Very Low
Low temperature / High-frequency characteristics	Bad	Good

EXAMPLE

E-CAP 6.3V / 220µF / 105℃ / 2,000h / 6.3x5.8mm I 360mΩ / ripple 0.240Arms

Drop-in Replacement

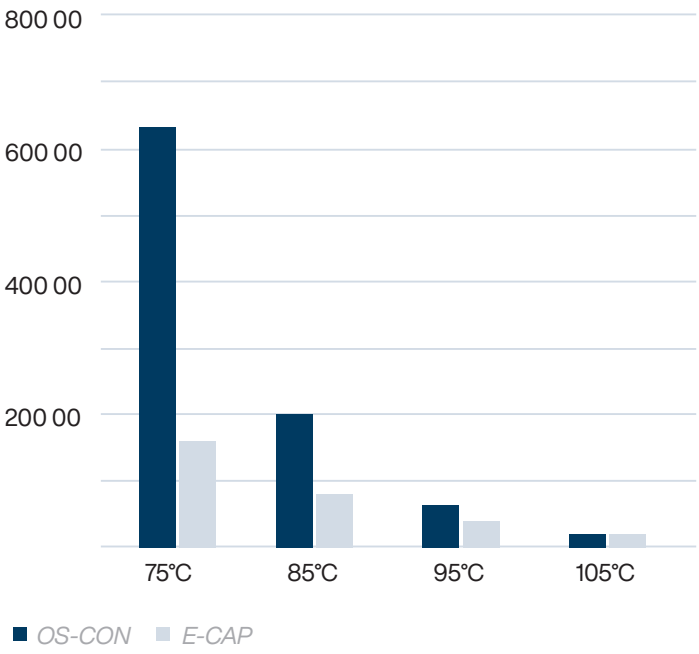
OS-CON 6.3V / 220µF / 105℃ / 2,000h / 6.3x6mm / ESR 27mΩ /ripple 2.32Arms

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



$Lx = Lox10^{\frac{To-Tx}{20}}$

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

OS-CON 20℃ down › x10 lifetime
Practical equation

E-CAP 10℃ down › x2 lifetime
Arrhenius equation

Panasonic
INDUSTRY

Your Committed Enabler

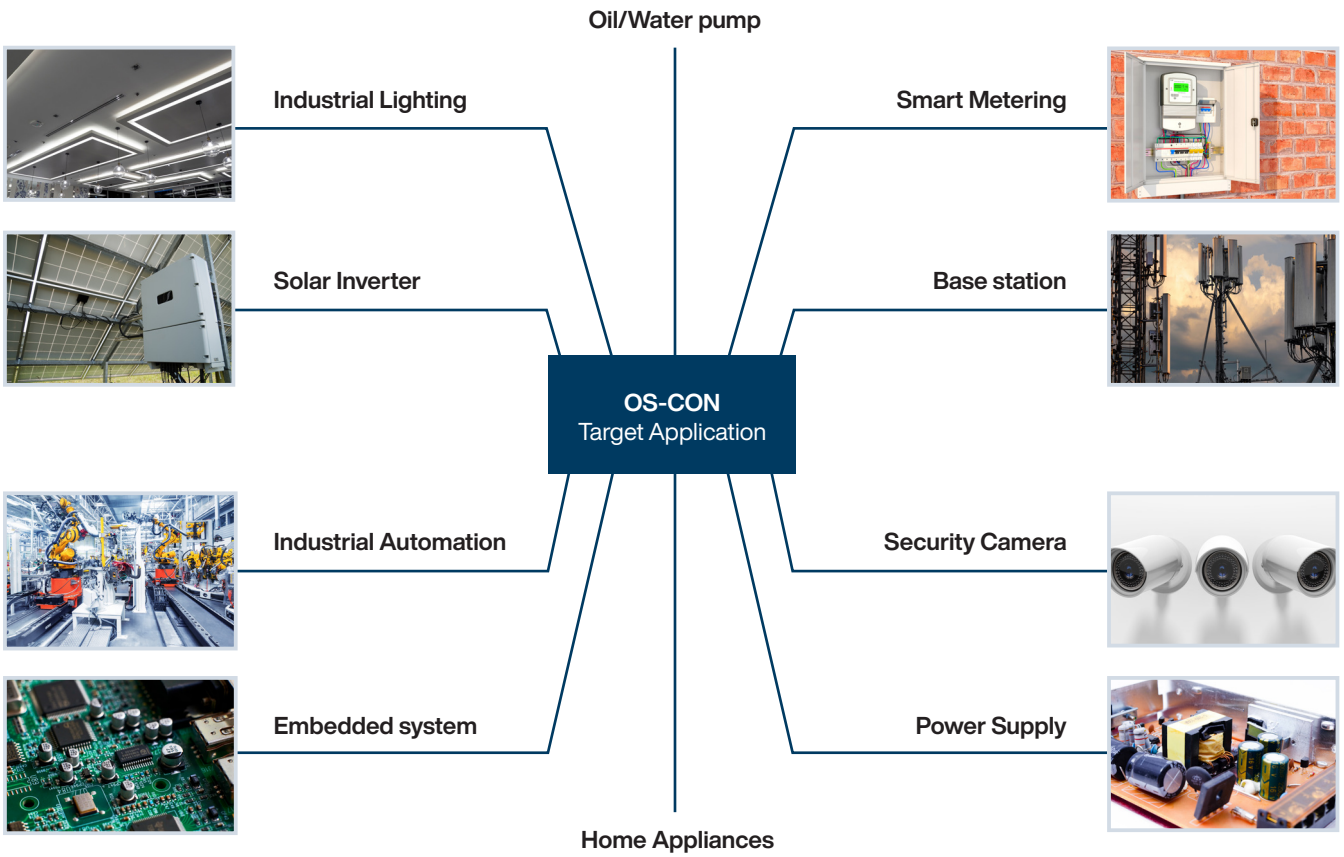
Conductive Polymer Solid capacitor OS-CON

An ideal replacement for Aluminum Electrolytic capacitors

WHERE DO WE OFFER ALTERNATIVES:

- Voltage up to 100V
- Capacitance up to 2,700µF
- 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

Or contact us for technical support:
capacitor@eu.panasonic.com