

EC-Series Capacitors



NWL's EC-Series metalized polypropylene DC link film capacitors offer large capacitance values, high Joule energy, and large current ratings in a single welded metal package. This dry resin filled package can have a variety of low inductance terminal options, brackets for mounting, and can also incorporate additional metal structure to accommodate additional components such as resistors, chill plates, etc.

EC-Series capacitors are well suited for many inverter applications including:

- DC input / output filtering
- DC Link
- AC harmonic filtering
- High energy storage pulse
- Traction drives and heavy vehicles

Unique features of the EC-Series capacitor include:

- **Large Capacitance values at high voltages** – By utilizing fabricated welded metal packages, NWL can incorporate large capacitance values with the higher voltage ratings.
- **Rugged metal cases** – Welded metal cans fabricated from alum, brass, steel, and stainless steel are provided for rugged packages up to 500 lbs.
- **Inverter design flexibility** – With an already fabricated metal package, NWL can fasten onto the metal container unique brackets to accommodate a variety of functionality.

EC-Series Capacitors Product Information and Specifications

General Specifications

Reference Standard	IEC 61071, UL 508C, IEC 1071-1
Capacitance Tolerance	+/- 10%
Voltage Characteristics	<ul style="list-style-type: none"> • DC rating continuous steady state condition • DC pk pulse duty, 10-100 % reversal • AC RMS from 10 Hz to 50 kHz • Test T-T @ 1.5 VDC, 10 seconds • Test T-C @ 2.0Vpk dc + 1000 V, 10 seconds
Current/Temp. ratings	<ul style="list-style-type: none"> • Ripple RMS current @ 55 °C ambient • Peak current @ 40 °C ambient
ESR	as low as 0.15 ohm
Inductance	as low as 5-10 nH ranges if required
Operating Temperature	-40 °C to +85 °C (-50 to +110 °C available)
Encapsulation	UL 94V-0 thermosetting resin

LIFE TIME EXPECTANCY vs HOT SPOT TEMPERATURE AND VOLTAGE

