

R-Series Capacitors



NWL's R-Series is a unique family of capacitor product that exhibits superior performance with high current and high frequency applications. By utilizing low inductance internal constructions, optional molded resin cases, and customized terminations, R-Series capacitors are designed for fast switching IGBTs and can serve as snubbers and high current high frequency input filters.

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

- Snubber capacitors
- High current DC input filters
- High frequency DC input filters
- Low inductance fast reactive clamp capacitors

Unique features of the R-Series capacitor include:

- **IGBT direct mount option** – With high current robust terminals spaced to match IGBT centers, NWL's R-Series capacitors can directly mount onto input connections on IGBTs.
- **Low inductance packages** – With the R-Series capacitors' dry resin filled construction, some unique internal laminated low impedance bus bar and terminal construction produce extremely low inductance values.
- **High heat dissipation package** – The R-Series capacitors can also utilize a resin mold package, combined with copper terminals to providing the best thermal heat dissipation systems available.

R-Series Capacitors Product Information and Specifications

The R-Series provides a wide range of package styles and specifications. For applications demanding unique sizes and low inductance while providing high RMS currents, the R-Series product utilizes a variety of film systems to fit many applications. Polypropylene/foil, metalized polypropylene, and polypropylene hybrids are utilized.

General Specifications

Capacitance Tolerance	+/- 10
Voltages	DC rating continuous steady state condition DC pk pulse duty, 0-100 % reversal AC RMS voltages from 10 Hz – 500 kHz
Current / Temp Ratings	+55 °C max ambient temperature
Operating Temperature	ripple RMS current @ 55 °C ambient peak current @ 40 °C ambient
Encapsulation	UL 94V-0 thermosetting resin