

## R-Series Capacitors

### Superior Performance and Reliability

NWL's R-Series IGBT Snubber Capacitors offer superior performance and economy for a multitude of high power IGBT applications.

The R-Series combine high current capability with very low inductance, low dielectric losses and capacitance stability across a wide range of frequencies. They offer the high peak current capability of a film foil capacitor with low inductance connecting terminals.

Our Snubbers are available in a wide range of ratings and can be customized to your exact application. Designers no longer have to compromise between current and inductance; the R-Series can handle currents of up to  $125 A_{rms}$  and are cost competitive with fast delivery.

### General Specifications

Capacitance Tolerance:  $\pm 10\%$

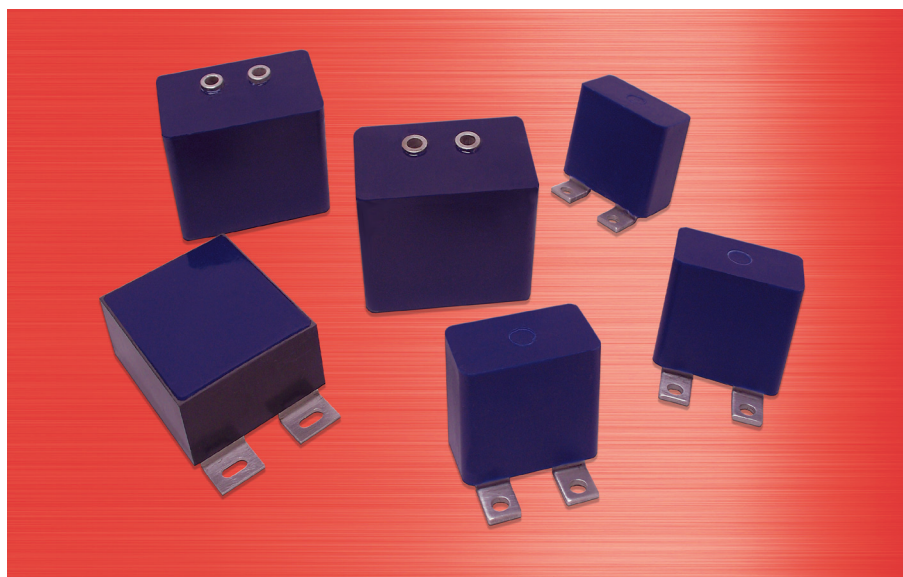
Operating Temperature:  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$

Ripple current: Standard ratings are given at an ambient temperature of  $55^{\circ}\text{C}$  and a nominal frequency. De-rate the current  $1.5\%/^{\circ}\text{C}$  from  $55^{\circ}\text{C}$  to  $85^{\circ}\text{C}$

Dielectric Strength: 200% of rated DC voltage, 60 seconds at  $25^{\circ}\text{C}$

Series Inductance:  $< 15 \text{ nH}$

Capacitor Mounting: Typical terminal spacing of 30 and 40 mm available to OEM customers



R-Series Capacitors in various configurations.



Transforming The Future Of Power Technology

204 Carolina Drive  
Snow Hill, NC 28580

phone: 252.747.5943  
fax: 252.747.8979

e-mail: sales.caps@nwl.com  
www.nwl.com/caps

CONSULT FACTORY WITH DETAIL REQUIREMENTS OR REQUEST TECHNICAL DIALOGUE

## R-Series Electrical Rating

NWL Part #	Cap (µF)	Voltage Surge (V <sub>s</sub> )	Voltage AC (V <sub>rms</sub> )	Max Current @ 55°C	Frequency (Hz)	Figure	Space S (in/mm)	Height H (in/mm)
<b>1000 VDC rated snubber capacitor (V<sub>n</sub> = 1000)</b>								
R00116	1	1800	500	75	3000	3	1.18/30	2.88/73
R00108	1.2	1800	500	45	1000	2	1.18/30	3.63/92
R00113	1.2	1800	500	45	1000	2	1.57/40	3.63/92
<b>1200 VDC rated snubber capacitor (V<sub>n</sub> = 1200)</b>								
R00111	0.012	2200	500	25	100,000	1	1.18/30	2.25/57
R00222	0.012	2200	500	25	100,000	1	1.57/40	2.25/57
R00112	0.025	2200	500	25	100,000	1	1.18/30	2.25/57
R00147	0.025	2200	500	25	100,000	1	1.57/40	2.25/57
R00120	0.038	2200	500	38	50,000	2	1.18/30	3.25/82.5
R00143	0.038	2200	500	38	50,000	2	1.57/40	3.25/82.5
R00121	0.06	2200	500	30	25,000	1	1.18/30	2.25/57
R00144	0.06	2200	500	30	25,000	1	1.57/40	2.25/57
R00104	0.5	2200	500	55	10,000	2	1.18/30	3.25/82.5
R00223	0.5	2200	500	55	10,000	2	1.57/40	3.25/82.5
R00117	1.75	1800	500	50	500	2	1.18/30	3.63/92
R00224	1.75	1800	500	50	500	2	1.57/40	3.63/92
<b>1600 VDC rated snubber capacitor (V<sub>n</sub> = 1600)</b>								
R00212	1	2500	450	80	3000	4	1.57/40	3.38/86
R00138	1.5	2200	450	80	1000	4	1.57/40	3.38/86
R00188	1.5	2500	700	25	100	2	1.57/40	3.25/82.5

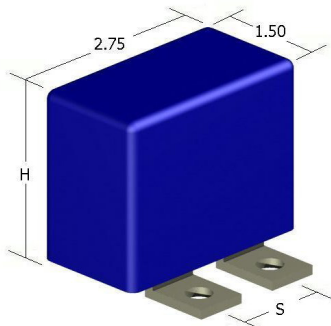


Figure 1

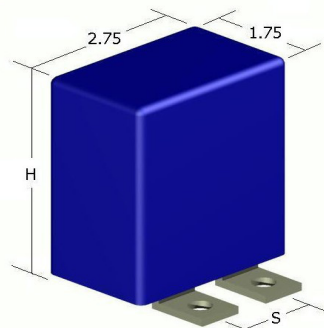


Figure 2

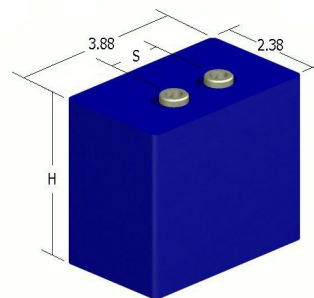


Figure 3

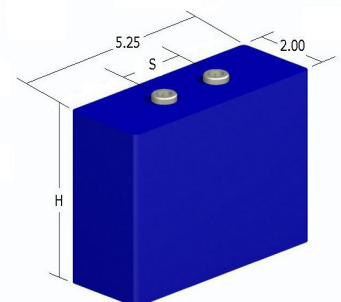


Figure 4