

# DC-Link Power Box Capacitors

## Overview

### Metallized Polypropylene, Power Box, Film (MKP)

DC-Link capacitors use thin polypropylene<sup>(3)</sup> film as their dielectric and are found in power converter circuits for DC filtering, and energy storage. These capacitors are stable over temperature, frequency and time. They have low DF, excellent self-healing capability, and long operational lifetimes.

### Device Applications

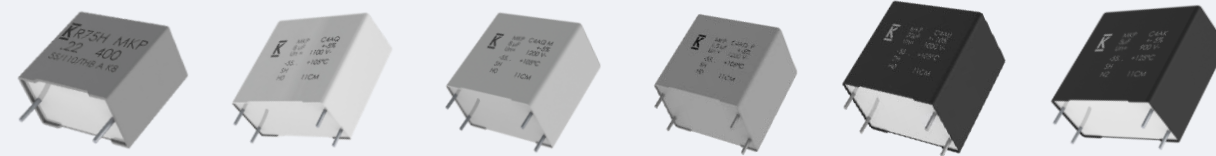
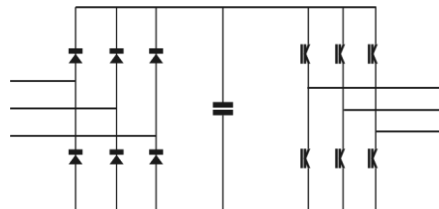
- Inverters
  - Green Energy: Solar and Wind
  - Automotive: Traction (C4E)
- On-Board Battery Charger
- Regenerative drives
- Motor Drives
- Welding Machines
- SMPS

### Benefits

- High Capacitance Density
- Extended life at >200,000 hours at VN at rated hot spot temperature
- High Reliability
- High ripple Current

### Applications

- DC link
- DC filtering
- Energy Storage



	<b>R75H</b> High Current	<b>C4AQ</b> standard	<b>C4AQ M</b> miniaturized	<b>C4AQ-P</b> high temp. extended life	<b>C4AU</b> Harsh environment	<b>C4AK</b> highest temp. extended life
<b>Min C (μF)</b>	1	1	1.1	1	1	1.5
<b>Max C (μF)</b>	33	210	210	210	210	60
<b>Max. Voltage (Vdc)</b>	2,000	1,500 <sup>(1)</sup>	1,200 <sup>(2)</sup>	1,100 <sup>(2)</sup>	1,200 <sup>(2)</sup>	900 <sup>(2)</sup>
<b>Max. Temperature (°C)</b>	125	125	125	125	85	135
<b>Life (h)</b>		200	200	4,000	200	1,000
<b>Construction</b>	Radial Plastic Box 2 leads	Radial Plastic Box 2/4 leads			Radial Plastic Box 2/4 leads	
<b>Power Level (kVA<sub>r</sub>)</b>	13	4	4	5	4	2
<b>Max. dv/dt (V/μs)</b>	9,500	33	90	37	19	--
<b>Harsh Environment</b> 60°C / 95% RH, 1,000h, Vr		•	•			
85 C / 85 % RH, 1000h, Vr	•			• <sup>(4)</sup>	•	•
<b>Industry</b>						