Overview

Pulse capacitors are defined as polypropylene film capacitors for applications that use the stable low dissipation factors required to handle high dv/dt and high ripple currents in power conversion applications. The construction of the pulse capacitor have the following advantages:

- **Single Metallized Film**
  - High energy density
  - High voltage and high current
  - Self-healing

- **Double Metallized Film**
  - Higher dv/dt performance
  - Higher current capabilities
  - Self-healing

- **Polypropylene Film / Foil**
  - Highest peak current support
  - Highest pulse current capabilities
  - No self-healing

Key Product Highlight

- **New R75H 125 °C Single Metallized film**, for automotive and harsh environmental applications (THB: 85°C, 85% R.H., 1,000 hours, Vrated).
  - The best endurance performance at 125°C, 2,000 hours, Vrated, in the industry.

- **R76H 125 °C Double Metallized film**, for automotive and harsh environmental applications (THB: 85°C, 85% R.H., 1,000 hours, Vrated).
  - The highest I rms capability per volume in the industry.

Typical Application

- Silicon-controlled rectifier (SCR and IGBT) and SiC (e.g. MOSFET) commutation circuits.
- DC Link, Snubber, resonant converters, and tank circuits.

Product Selection

- **Series Options**
  - Single Metallized
  - Double Metallized
  - PP Film / Foil

- **Capacitance (µF)**

<table>
<thead>
<tr>
<th>Capacitance (µF)</th>
<th>10 pF</th>
<th>100 pF</th>
<th>1 nF</th>
<th>10 nF</th>
<th>0.1 µF</th>
<th>1 µF</th>
<th>10 µF</th>
<th>100 µF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage (VDC)</td>
<td>500</td>
<td>700</td>
<td>1,000</td>
<td>1,500</td>
<td>2,000</td>
<td>3,000</td>
<td>5,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

Series Options

- **Single Metallized Film**
  - **R74**
    - 900 VAC +105 °C
  - **R75**
    - 2,000 VDC +105 °C
  - **R75H 125 °C**
    - 2,000 VDC +125 °C
  - **A70**
    - 630 VDC +105 °C
  - **F46x**
    - 2,500 VDC +105 °C

- **Double Metallized**
  - **R76**
    - 2,000 VDC +105 °C
  - **R76H 125 °C**
    - 2,000 VDC +125 °C
  - **PHE450**
    - 3,000 VDC +125 °C

- **Polypropylene Film / Foil**
  - **R73**
    - 2,000 VDC +105 °C
  - **A72**
    - 2,000 VDC +105 °C
  - **PFR**
    - 1,000 VDC +100 °C

- **HV+**
- **HV-**
- **DC Link**
- **Resonant Tank**
- **Snubber**

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