Why Choose KEMET

KEMET applies world-class service and quality to deliver industry-leading, high performance capacitance solutions worldwide. With 95% of possible dielectric solutions, KEMET offers the world’s most complete line of surface mount and through-hole capacitor technologies across tantalum, ceramic, film, aluminum and paper dielectrics. One world. One KEMET.

Features & Benefits

- Long life at high voltage and ambient temperature
- Standard, optimized and custom film and electrolytic designs
- New film metallization configuration with plastic or metallic housing sealed by epoxy or polyurethane resins
- New production process for thermal treatment

Product Checklist

- What is the end product application?
- What is the expected annual volume?
- What is the needed capacitance value?
- Is it fixed or dependent on the allowed ripple current?
- What is the ambient temperature profile?
- What is the requirement for expected life?
- Is there cooling? What kind?
- What is the DC voltage?
- What is the ripple current and frequency?
- Is the ripple current steady-state or intermittent?

Programs Supported

- Hybrid and electric defense vehicles
- AC motor drives for motion control (aircraft systems, defense apparatus)

KEMET Products

<table>
<thead>
<tr>
<th>Product Family</th>
<th>KEMET Series</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Link</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum Electrolytic</td>
<td>PEG124, PEG225, PEG226</td>
<td>Axial</td>
</tr>
<tr>
<td></td>
<td>Long life/ high ripple ALS and ALC series</td>
<td>Screw Terminal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Snap-In</td>
</tr>
<tr>
<td>Wound (500 – 1,200 VDC, PP or PET) or Stacked (50 – 500 VDC, PP) Film</td>
<td>C4AE, C4DE, C44U</td>
<td>PCB Box Mount, Screw Terminal Can</td>
</tr>
<tr>
<td>Tantalum, Hi-Rel COTS</td>
<td>T493, T497, T513</td>
<td>Surface Mount</td>
</tr>
<tr>
<td>Tantalum, Hi-Rel Polymer COTS</td>
<td>T540, T541</td>
<td>Surface Mount</td>
</tr>
<tr>
<td>Tantalum, Polymer Herm Seal</td>
<td>T550</td>
<td>Hermetic Seal Through-Hole</td>
</tr>
</tbody>
</table>

For more information, samples and engineering kits, please visit us at www.kemet.com or call 1.877.myKEMET.
## Hybrid and Electric Defense Vehicles

High Power and High Energy Capacitors

<table>
<thead>
<tr>
<th>Product Family</th>
<th>KEMET Series</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceramics, KPS</td>
<td>Standard EIA case sizes (1210-2220), 1-2 chip stacks</td>
<td>Surface Mount</td>
</tr>
<tr>
<td>Ceramics, High Temperature and High Voltage Products</td>
<td>High temperature 200°C COG, HT/ HP HV Series ACR/ ACA ARR/ ARA</td>
<td>Surface Mount</td>
</tr>
</tbody>
</table>

![Diagram of Boost Converter, Motor Inverter, Generator Inverter](image)

- **Boost Converter**: IPM, Inductor, Filter Capacitor
- **Motor Inverter**: DC Link Capacitor
- **Generator Inverter**: Motor, Generator

- **250V Batt**: 250V HV Batt
- **Filter Capacitor**: Capacitor

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**SA0512**

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