IGBT SNUBBER CAPACITORS - DIRECT MOUNTING

MKRS

Highlights
- Self-healing property
- High DV / DT
- Low ESR
- Low loss polypropylene dielectric
- Reference standard-IEC 61071
- Flame retardant UL94 - V0, ROHS compliant

Construction
Extended double metallised polyester electrodes with metallised polypropylene dielectric internal series connection

Applications
These capacitors are used in high voltage, high current and high pulse applications such as:
- IGBT protection circuits
- Snubber networks
- Energy conversion and control in power electronics
- Protection circuits in SMPS
MKRS

Technical Specifications

Physical Characteristics

- Dielectric material: Polypropylene film.
- Electrode material: Metallized polypropylene film.
- Winding construction: Metallised polypropylene dielectric internal series connection.
- Enclosure: Preformed UL 94 V-0 plastic case with thermostetting resin-fill.

Electrical Characteristics

- Capacitance range: 0.1 MFD to 2.0 MFD
- Capacity tolerance: ±5%(J), ±10%(K)
- Rated voltage VDC: 600, 700, 1000, 1200, 1500, 2000, 2500
- Test voltage between terminals: 1.5 x rated voltage VDC for 2 seconds
- Test voltage terminal to case: 3KVAC at 50Hz for 60 seconds
- Dissipation factor (Tan d): ≤0.0005 at 1 KHz and 25°C
- Temperature range: -40°C to +105°C
- Insulation resistance at 25°C & at a test voltage of 500 VDC applied for 1 minute:
  - C ≤ 0.33 MFD: ≥100,000MΩ
  - C > 0.33 MFD: ≥30,000MΩ

Marking on Capacitors

Each capacitor will have the following information printed on it, sequentially:

- The Company’s symbol 🍀 followed by the words ALCON
- The capacitor grade viz MKRS
- The capacitance value MFD
- The rated voltage VDC
- Capacity tolerance and manufacturing code
- Part number on non-standard capacitors
### Standard Capacitor Values

<table>
<thead>
<tr>
<th>Rated Capacitance MFD</th>
<th>Rated DC Voltage</th>
<th>Rated AC Voltage</th>
<th>Case Code</th>
<th>Case Size</th>
<th>Case Size</th>
<th>DV/DT V/μsec</th>
<th>I Peak Amps</th>
<th>I rms Max at 100kHz &amp; 70°C Amps</th>
<th>Typical ESR at 100kHz mΩ</th>
<th>Ordering Code*</th>
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<tbody>
<tr>
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<td>2500</td>
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### Capacitor Drawings and Terminal Styles

**Style 3PLA**

- **Dimension in mm.**
  - H = 11
  - L = 2
  - Ø6.5x3
  - 12 = P³

- **Circuit Symbol**
  - C₁
  - C₂

**Style 3PLB**

- **Dimension in mm.**
  - H = 11
  - L = 1
  - Ø6.5x3
  - 12 = P³

- **Circuit Symbol**
  - C₁
  - C₂

Catalogue No. AEPI MKRS - JULY - 2020 (Rev 01)
The specification shown herein (page 1 to 3) pertain to the current manufacturing range of the Company. The Company reserves the right to change and/or modify any part of or whole of the specifications as a result of research and development and as may be necessary, without prior notice.

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