KEMET’s Solid Capacitor Business Group (SCBG) is pleased to announce the release of our T583 Space Grade Series. This addition to KEMET’s Organic Capacitor (KO-CAP®) line is the first ESCC (European Space Components Coordination) Epoxy Coated SMD Polymer Capacitor available on the market today.

"KEMET’s official announcement is planned for Thursday, June 1, 2017"

KEMET’s T583 Space Grade Series is designed for mission critical applications where short and long-term reliability are paramount. This product demonstrates low and stable ESR and very high ripple current capability as compared to MnO2 capacitors of the same case size, capacitance and voltage rating. The T583 Series is manufactured in Europe (Evora, Portugal) and is suitable for industrial, communications, military and aerospace applications.

With its robust anode quality, benign failure mode, mechanically robust assembly and epoxy housing, the T583 Series is ideal for use in point-of-load applications such as buck/boost converters, filtering, hold-up and other high ripple or high in-rush current applications. The T583 Series provides extremely low and stable ESR and superior capacitance retention at higher frequencies and lower temperatures and in many applications, results in the use of fewer components. The effects of this are lighter weight (critical for flight), board space savings and lower total cost of ownership.

The T583 Series is compliant with ESCC Generic Specification No. 3012/005 for Capacitors, Leadless Surface Mounted, Tantalum, Solid Electrolyte to insure these products are suitable for mission critical applications. The T583 Series was designed to operate in a temperature range of -55°C to +105°C.

KEMET will release the QPL versions in 2018.
**Benefits & Features**
- Operating temperature range of -55°C to +105°C
- Capacitance values of 33 to 150 μF
- Voltage rating of 6 - 16 VDC
- High frequency capacitance retention
- High ripple capability
- ESCC Detail Specification No. 3012/005
- Ultra-Low ESR designed parts
- Volumetrically efficient
- EIA standard case sizes

**Pricing & Lead Time**
- Pricing is Manual.
- Standard lead time is stock to 34 weeks after receipt of order (ARO) depending on LAT (Lot Acceptances Testing) Requirements.

**Performance Characteristics and Qualification Detail**

<table>
<thead>
<tr>
<th>Item</th>
<th>Performance Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temp.</td>
<td>-55°C to +105°C</td>
</tr>
<tr>
<td>Rated Capacitance Range</td>
<td>33 - 150 μF at 120 Hz/25°C</td>
</tr>
<tr>
<td>Capcitance Tolerance</td>
<td>M Tolerance (20%)</td>
</tr>
<tr>
<td>Rated Voltage Range</td>
<td>6.3 - 16V</td>
</tr>
<tr>
<td>DF (120Hz)</td>
<td>Refer to Part Number Electrical Specification Table</td>
</tr>
<tr>
<td>ESR (100kHz)</td>
<td>Refer to Part Number Electrical Specification Table</td>
</tr>
<tr>
<td>ESR (100kHz)</td>
<td>≤ 0.01CV (MA) at rated voltage after 5 minutes</td>
</tr>
</tbody>
</table>

KEMET T583 series is supported by the 3012/005 ESCC detail specification and it is included in the ESCIES, European Preferred Parts List (EPPL).

**Training Module**
- See attached

**FAQ’s**
- Please see information included in the KEMET Internal Training Module. Any additional question please contact cristinacaetano@kemet.com

**Sales Aid & Detailed Specification**
- Samples
  - On-hand Samples are available upon request.
• Spice
  o T583 part numbers are already available at www.kemet.com

Target & Potential Target List
• Customers designing applications for Space market
• Contact PM for regional customer list.