**Tantamount Polymer Through-Hole Capacitors**

**T550 Axial Polymer Hermetic Seal (PHS) and DLA Series**

**Why Choose KEMET**

KEMET Corporation is a leading global supplier of electronic components. We offer our customers the broadest selection of capacitor technologies in the industry, along with an expanding range of electromechanical devices, electromagnetic compatibility solutions and supercapacitors. Our vision is to be the preferred supplier of electronic component solutions for customers demanding the highest standards of quality, delivery and service.

**Features & Benefits**

- Includes F-Tech anode which eliminates hidden defects in the dielectric
- 100% Simulated Breakdown Screening
- Voltage rating: 6 to 75 VDC
- Polymer cathode technology
- ≤ 0.0075 CV (μA) at rated voltage after 5 minutes
- Extremely low ESR
- High frequency capacitance retention
- Low temperature capacitance retention
- 100% accelerated steady state aging
- 100% surge current tested
- Volumetrically efficient
- Use of up to 80% of rated voltage
- Non-ignition failure mode
- Approximately 25% lighter than equivalent wet tantalum
- Case dimensions equivalent to MIL-PRF-39006/25
- Capacitance: 20 to 820 μF
- Meets all requirements of DLA Drawing 13030

**Product Checklist**

- What is the actual required capacitance?
- What is the operating temperature and frequency?
- What is the actual operating voltage?
- Are there any voltage spikes or reverse voltage expected?
- Are there any mechanical robustness concerns, such as vibration or shock?
- What are the ESR requirements?

**Programs Supported**

High voltage power management applications such as:

- Buck boost converters
- Filtering
- Hold-up capacitors
- Other high ripple current applications

**Advantages Over Wet Tantalum**

- Up to 90% lower ESR
- Approximately 40% increased ripple current capabilities
- Approximately 25% lighter package
- Improved capacitance retention at high frequency and low temperature
- Improved shock and vibration handling

![Comparison of ESR in Polymer Hermetic Seal and Wet Tantalum capacitors](image1)

![Comparison of capacitance in Polymer Hermetic Seal and Wet Tantalum capacitors](image2)

![Comparison of reverse voltage in Polymer Hermetic Seal and Wet Tantalum capacitors](image3)

For more information, samples and engineering kits, please visit us at www.kemet.com or call 1.877.myKEMET.
Tantalum Polymer Through-Hole Capacitors
T550 Axial Polymer Hermetic Seal (PHS) and DLA Series

Ratings & Part Number Reference

<table>
<thead>
<tr>
<th>Rated Voltage (V)</th>
<th>Rated Capacitance (µF)</th>
<th>Case Sizes</th>
<th>KEMET Part Number</th>
<th>DC Leakage pA @ 25°C max/mins</th>
<th>% @ 25°C 120 Hz Max</th>
<th>Maximum ESR mΩ @ 25°C 100 kHz</th>
<th>Ripple Current mArms @ 85°C 40 kHz (A)</th>
<th>DLA (082) Drawing Number</th>
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</thead>
<tbody>
<tr>
<td>25</td>
<td>100</td>
<td>B</td>
<td>T550B101(0)010A(0)</td>
<td>7.5</td>
<td>5.0</td>
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<td>13030-02(1)A(4)(1)(6)</td>
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<td>23.4</td>
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(1) To complete KEMET part number, insert M for ±20% or K for ±10%. Designates capacitance tolerance.
(2) To complete KEMET part number, insert A = N/A, B = standard reliability, or T = high reliability.
(3) To complete KEMET part number, insert T = 100% Matte Tin (Sn) Plated, H = Standard Solder coated (SnPb 5% Pb minimum). Designates termination finish.
(4) To complete the DLA PIN number, insert the insulation option, S = Sleeved, U = Unsealed.
(5) To complete the DLA PIN number, insert the lead length option, L = 1.50 in
(6) To complete the DLA PIN number, insert the product level option, B = standard reliability or T = high reliability.

<table>
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<tr>
<th>T</th>
<th>M</th>
<th>B</th>
<th>197</th>
<th>625</th>
<th>A</th>
<th>T</th>
<th>4251</th>
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<tbody>
<tr>
<td>Capacitor Class</td>
<td>Series</td>
<td>Case Size</td>
<td>Capacitance Code (pF)</td>
<td>Capacitance Tolerance</td>
<td>Voltage</td>
<td>Failure Rate / Design</td>
<td>Load Material</td>
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<tr>
<td>T = Tantalum</td>
<td>000 = Polymer Hermetic Seal</td>
<td>B</td>
<td>First two digits represent significant figures. Third digit specifies number of series.</td>
<td>K = ± 10%, M = ±20%</td>
<td>000 = 6.3 V</td>
<td>A = N/A</td>
<td>H = Tinplated (SnPb solder coated (5% Pb minimum)</td>
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<tr>
<td>4250 = Surge current, 10-cycles ±25°C</td>
<td>13030 = Surge current, 10-cycles ±55°C and ±85°C</td>
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* Failure rate applies only to DLA part numbers.

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<th>13030</th>
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<th>A</th>
<th>S</th>
<th>L</th>
<th>B</th>
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<tr>
<td>Drawing Number</td>
<td>Dash Number</td>
<td>Capacitance Tolerance</td>
<td>Surge Current Testing</td>
<td>Insulation</td>
<td>Lead Length</td>
<td>Level</td>
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<tr>
<td>See Part Numbers list</td>
<td>K = ±10%, M = ±20%</td>
<td>A = ± 25°C ± 5°C, 10-cycles, after constant voltage conditioning</td>
<td>S = Sleeved, U = Unsealed</td>
<td>L = 1.50 inches (standard)</td>
<td>B = Standard reliability</td>
<td>T = High reliability</td>
</tr>
</tbody>
</table>

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