


Reference: QOD-510

## Process Change Notification

### Polymer Electrolytic Capacitors - Thermal Shock Testing Removal

<b>Date:</b> Sept 5 <sup>th</sup> , 2019	<b>ID Number (MMDDYY):</b> PCN090519-UMQ
<b>Affected Products</b>	<p><b>Product Series:</b> T545 series  <b>Case size:</b> W (7343-15), V (7343-20), H (7360-20), Y (7343-40) &amp; X (7343-43)  <b>Capacitance value:</b> 47 -1500µA  <b>Capacitance tolerance:</b> K (10%) and M (20%)  <b>Voltage:</b> 6 - 20V  <b>Failure Rate:</b> A  <b>Lead Termination:</b> T (100% Tin)  <b>ESR value:</b> 25 – 70mOms          (list of impacted PN's – see <b>Appendix 1</b>)</p>
<b>Change</b>	<p><b>Change Type:</b> In Line batches process</p> <p><b>From:</b> 100% in line thermal shock</p> <div style="display: flex; justify-content: space-between;"> <div data-bbox="436 953 537 984"> <p><b>Overview</b></p> <p>The KEMET Organic Capacitors (KO-CAP) are preferred solutions for applications requiring power loss protection (hold-up) or maximum power efficiency of a circuit when board space is limited. Desired benefits include high energy density, stable capacitance with applied voltage and temperature, and no aging effects. The conductive polymer cathode of these solid electrolytic capacitors</p> </div> <div data-bbox="1182 953 1468 989" style="text-align: right;">  </div> </div> <div style="display: flex; justify-content: space-between;"> <div data-bbox="436 1012 927 1199"> <p>provide very low ESR and higher capacitance retention at high frequencies. Unlike liquid electrolyte-based capacitors, KEMET polymer capacitors have a very long operational life and high ripple current capabilities. Capacitors from T520, T521, and T523 series are commonly used in these applications. The T545 and T548 were introduced to meet specific needs for a subsegment of solid state drives.</p> </div> <div data-bbox="959 1012 1474 1199"> <p>provide very low ESR and higher capacitance retention at high frequencies. Unlike liquid electrolyte-based capacitors, KEMET polymer capacitors have a very long operational life and high ripple current capabilities. Capacitors from T520, T521, and T523 series are commonly used in these applications. The T545 and T548 were introduced to meet specific needs for a subsegment of solid state drives.</p> </div> </div> <hr/> <div data-bbox="436 1251 529 1283"> <p><b>Benefits</b></p> <ul style="list-style-type: none"> <li>• Highest energy per unit volume</li> <li>• Stable capacitance across temperature and voltage</li> <li>• No aging effects</li> <li>• Low ESR values</li> <li>• High frequency capacitance retention</li> <li>• High ripple handling</li> <li>• 100% accelerated steady state aging</li> <li>• 100% surge current tested</li> <li>• 100% thermal shock tested (T545 only)</li> <li>• Halogen-free epoxy and RoHS compliant</li> </ul> </div>



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<b>Effective Date and Identification</b>	<p>The change announced in this PCN will be implemented 90 days from the notification date. (Dec 2, 2019)          Shipments after the implementation date may contain product prior to the change during the transition period until the existing inventories have been depleted.</p>
<b>For General Information Contact</b>	<p>If required, you may contact your local sales representative to request samples.</p> <p>Ursula Quezada          PCN Coordinator – Tantalum Capacitors          Ph: +1 (956) 548 7308  <a href="mailto:ursulaquezada@kemet.com">ursulaquezada@kemet.com</a></p>
<b>Appendix 1          Affected Part types</b>	<p>T545W476M016ATE045          T545W477M006ATE035          T545W477M006ATE045          T545W477M006ATE055          T545W476M020ATE045          T545W476M020ATE055          T545V476M016ATE045          T545V476M016ATE070          T545V107M016ATE050          T545V227M010ATE045          T545V337M006ATE045          T545V477M006ATE055          T545H108M006ATE055          T545H158M006ATE035          T545H158M006ATE055          T545H187M016ATE055          T545Y337M010ATE035          T545X227M016ATE035          T545X337K016ATE025          T545X337M016ATE025</p>

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