

Reference: QOD-510

## Product Change Notification PCN-102919-ASG-COMM

<b>Date:</b>	<b>ID Number (MMDDYY):</b> 102919-COMM																																																																												
<b>Affected Products</b>	<p><b>Product Series:</b> Flexible Termination System X7R dielectric - Commercial grade only.</p> <p><b>Part Types.</b></p> <ul style="list-style-type: none"> <li>X7R 1210 EIA Case Size 4.7uF 50V</li> </ul> <p><b>Termination System/s and finishes:</b> Flexible Termination with 100% Sn</p> <p><b>Product Grade/s:</b></p> <ul style="list-style-type: none"> <li>Commercial grade (See Part Types affected section for details)</li> </ul>																																																																												
<b>Product Series Ordering Information</b>	<p><b>Standard &amp; Flexible Termination</b></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>C</th> <th>1210</th> <th>C</th> <th>475</th> <th>K</th> <th>5</th> <th>R</th> <th>A</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>Ceramic</td> <td>Case Size (L" x W")</td> <td>Specification/Series</td> <td>Capacitance Code (pF)</td> <td>Capacitance Tolerance</td> <td>Rated Voltage (VDC)</td> <td>Dielectric</td> <td>Failure Rate / Design</td> <td>Termination Finish</td> </tr> <tr> <td></td> <td>1210</td> <td>C=Standard Termination X=Flexible Termination</td> <td>2 Sig. digits+ + Number of zeros</td> <td>J = ±5% K = ±10% M = ±20%</td> <td>5 = 50</td> <td>R=X7R</td> <td>A=N/A</td> <td>C=100%Matte Sn</td> </tr> </tbody> </table> <p>Ordering Information for both Standard and Flexible Termination is not changing with this PCN.</p>	C	1210	C	475	K	5	R	A	C	Ceramic	Case Size (L" x W")	Specification/Series	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Dielectric	Failure Rate / Design	Termination Finish		1210	C=Standard Termination X=Flexible Termination	2 Sig. digits+ + Number of zeros	J = ±5% K = ±10% M = ±20%	5 = 50	R=X7R	A=N/A	C=100%Matte Sn																																																	
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<b>Effective Date and Identification</b>	<p>Beginning November 29<sup>th</sup>, 2019 (Please see full list of affected part types for conversion dates)</p> <p>Date Code. 1949XXXXXX</p> <ul style="list-style-type: none"> <li>Samples on these parts are available through your sales representative.</li> </ul>																																																																												
<b>Change Description</b>	<p><b>Change Classification.</b> Minor</p> <p><input type="checkbox"/> Form</p> <p><input type="checkbox"/> Fit</p> <p><input checked="" type="checkbox"/> Function</p> <p>KEMET is optimizing the dielectric formulation and designs to meet the growing global demand of class II X7R ceramic capacitors.</p> <p>Primary material set of the X7R dielectric will remain BaTiO<sub>3</sub> although minor modifications to dopants and powders have occurred which remain proprietary.</p> <p>Part types affected by this change continue to meet or exceed Automotive Electronics Council AEC-Q200 qualification in addition to internal KEMET qualification standards (Qualification Packages upon request).</p> <p><b>Dimensional and Electrical Parameters.</b></p> <p><b>Standard Termination</b></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Part Type</th> <th colspan="2">Length (mm)</th> <th colspan="2">Width (mm)</th> <th colspan="2">Thickness (mm)</th> <th colspan="2">pcs/reel (7" reel/13" reel)</th> <th colspan="2">DF (max %)</th> <th colspan="2">IR min (Mohm)</th> </tr> <tr> <th>Current</th> <th>Planned</th> <th>Current</th> <th>Planned</th> <th>Current</th> <th>Planned</th> <th>Current</th> <th>Planned</th> <th>Current</th> <th>Planned</th> <th>Current</th> <th>Planned</th> </tr> </thead> <tbody> <tr> <td>X7R 1210 4.7µF 50V</td> <td>3.20 ± 0.30</td> <td>3.20 ± 0.30</td> <td>2.50 ± 0.22</td> <td>2.50 ± 0.22</td> <td>2.50 ± 0.30</td> <td>2.50 ± 0.30</td> <td>1,000/4,000</td> <td>1,000/4,000</td> <td>2.5</td> <td>5.0</td> <td>106.4</td> <td>21.28</td> </tr> </tbody> </table> <p><b>Flexible Termination</b></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Part Type</th> <th colspan="2">Length (mm)</th> <th colspan="2">Width (mm)</th> <th colspan="2">Thickness (mm)</th> <th colspan="2">pcs/reel (7" reel/13" reel)</th> <th colspan="2">DF (max %)</th> <th colspan="2">IR min (Mohm)</th> </tr> <tr> <th>Current</th> <th>Planned</th> <th>Current</th> <th>Planned</th> <th>Current</th> <th>Planned</th> <th>Current</th> <th>Planned</th> <th>Current</th> <th>Planned</th> <th>Current</th> <th>Planned</th> </tr> </thead> <tbody> <tr> <td>X7R 1210 4.7µF 50V</td> <td>3.30 ± 0.40</td> <td>3.30 ± 0.40</td> <td>2.60 ± 0.30</td> <td>2.60 ± 0.30</td> <td>2.50 ± 0.30</td> <td>2.50 ± 0.30</td> <td>1,000/4,000</td> <td>1,000/4,000</td> <td>2.5</td> <td>5.0</td> <td>106.4</td> <td>21.28</td> </tr> </tbody> </table>	Part Type	Length (mm)		Width (mm)		Thickness (mm)		pcs/reel (7" reel/13" reel)		DF (max %)		IR min (Mohm)		Current	Planned	Current	Planned	Current	Planned	Current	Planned	Current	Planned	Current	Planned	X7R 1210 4.7µF 50V	3.20 ± 0.30	3.20 ± 0.30	2.50 ± 0.22	2.50 ± 0.22	2.50 ± 0.30	2.50 ± 0.30	1,000/4,000	1,000/4,000	2.5	5.0	106.4	21.28	Part Type	Length (mm)		Width (mm)		Thickness (mm)		pcs/reel (7" reel/13" reel)		DF (max %)		IR min (Mohm)		Current	Planned	Current	Planned	Current	Planned	Current	Planned	Current	Planned	Current	Planned	X7R 1210 4.7µF 50V	3.30 ± 0.40	3.30 ± 0.40	2.60 ± 0.30	2.60 ± 0.30	2.50 ± 0.30	2.50 ± 0.30	1,000/4,000	1,000/4,000	2.5	5.0	106.4	21.28
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<b>For General Information Contact</b>	<p>Adriana Sanchez          Product Management Automotive SCBG Ceramics          +1 (864) 228 4381  <a href="mailto:AdrianaSanchez@kemet.com">AdrianaSanchez@kemet.com</a></p> <p>Craig Scruggs          Product Management Automotive SCBG Ceramics          +1 (864) 228 4178  <a href="mailto:CraigScruggs@kemet.com">CraigScruggs@kemet.com</a></p>																					
<b>Affected Part Numbers</b>	<p>Please refer to "Affected Part Types" Excel file for KEMET part numbers being affected by this change.</p> <p>Part numbers listed in the "Affected Part Types" excel file will begin to be supplied on November 29<sup>th</sup>, 2019.</p> <p>Only the part numbers listed will be impacted.</p> <p style="text-align: center;"><b>PCN Information</b>          Reference: QOD-510</p> <p><a href="#">List of affected part types based on shipments of the last 2 years</a></p> <p>Note. Any new part type to be set up after the issue of this PCN (October 19th, 2019) will be set up with designs and materials post this change</p> <table border="1"> <thead> <tr> <th>PCN Name</th> <th>KEMET Part Type</th> <th>Implementation Date</th> </tr> </thead> <tbody> <tr> <td>PCN-102919-ASG-COMM</td> <td>C1210X475K5RAC7800</td> <td>Novemeber 29th, 2019</td> </tr> <tr> <td>PCN-102919-ASG-COMM</td> <td>C1210X475J5RAC7800</td> <td>Novemeber 29th, 2019</td> </tr> <tr> <td>PCN-102919-ASG-COMM</td> <td>C1210X475M5RAC7800</td> <td>Novemeber 29th, 2019</td> </tr> <tr> <td>PCN-102919-ASG-COMM</td> <td>C1210X475K5RAC</td> <td>Novemeber 29th, 2019</td> </tr> <tr> <td>PCN-102919-ASG-COMM</td> <td>C1210X475K5RAC7210</td> <td>Novemeber 29th, 2019</td> </tr> <tr> <td>PCN-102919-ASG-COMM</td> <td>C1210X475K5RAC76217800</td> <td>Novemeber 29th, 2019</td> </tr> </tbody> </table>	PCN Name	KEMET Part Type	Implementation Date	PCN-102919-ASG-COMM	C1210X475K5RAC7800	Novemeber 29th, 2019	PCN-102919-ASG-COMM	C1210X475J5RAC7800	Novemeber 29th, 2019	PCN-102919-ASG-COMM	C1210X475M5RAC7800	Novemeber 29th, 2019	PCN-102919-ASG-COMM	C1210X475K5RAC	Novemeber 29th, 2019	PCN-102919-ASG-COMM	C1210X475K5RAC7210	Novemeber 29th, 2019	PCN-102919-ASG-COMM	C1210X475K5RAC76217800	Novemeber 29th, 2019
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