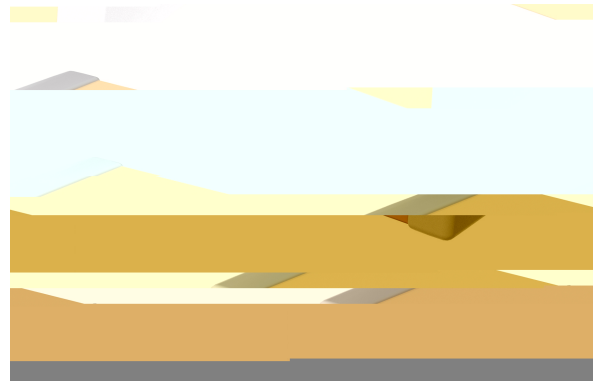


classification are temperature compensating and are

Capacitance change is limited to $\pm 30\text{ppm}/^\circ\text{C}$ from -55°C

and find conventional use as snubbers or filters in

Electronics Council's AEC-Q200 qualification requirements.



		Specification/							
			significant						

¹ Additional capacitance tolerance offerings may be available. Contact KEMET for details.

² Additional termination finish options may be available. Contact KEMET for details.



¹ Reeling tape options (Paper or Plastic) are dependent on capacitor case size (L" x W") and thickness dimension. See "Chip Thickness/Tape & Reel Packaging Quantities" and "Tape & Reel Packaging Information".

² The 2 mm pitch option allows for double the packaging quantity of capacitors on a given reel size. This option is limited to EIA 0603 (1608 metric) case size devices. For more information regarding 2 mm pitch option see "Tape & Reel Packaging Information".

³ All Automotive packaging C-Specs listed exclude the option to laser mark components. Please contact KEMET if you require a laser marked option. For more information see "Capacitor Marking".

³ For additional Information regarding "AUTO" C-Spec options, see "Automotive C-Spec Information."

Benefits

- AEC-Q200 automotive qualified
- Operating temperature range of -55°C to +125°C

- Capacitance offerings ranging from 1pF to 0.150µF

Details regarding test methods and conditions are referenced in document AEC-Q200, Stress Test Qualification for Passive Components. These products are supported by a Product Change Notification (PCN) and Production Part Approval Process

component without the requirement to submit a customer Source Controlled Drawing (SCD) or specification for review by a

Product Change Notification (PCN)

The KEMET Product Change Notification system is used to communicate primarily the following types of changes:

- Product/process changes that affect product form, fit, function, and/or reliability

	Customer Notification due to:		

KEMET assigned C-Specs require the submittal of a customer SCD or customer specification for review. For additional information contact KEMET.

The purpose of the Production Part Approval Process is:

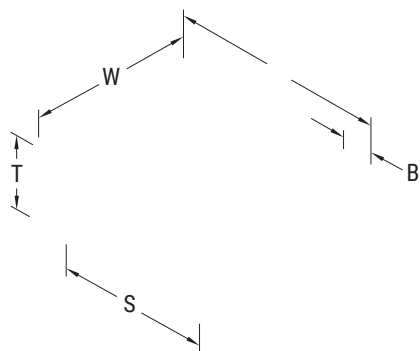
- To provide the evidence that all customer engineering design record and specification requirements are properly understood and fulfilled by the manufacturing organization.

	•	•	•	•	•
	○		○		

¹ KEMET assigned C-Specs require the submittal of a customer SCD or customer specification for review. For additional information contact KEMET.

- Part number specific PPAP available

○



Qualification/Certification

regarding test methods and conditions are referenced in document AEC-Q200, Stress Test Qualification for Passive

	-55°C to +125°C
	1,000 megohm microfarads or 100 GΩ

¹ DWV is the voltage a capacitor can withstand (survive) for a short period of time. It exceeds the nominal and continuous working voltage of the capacitor.

² Capacitance and dissipation factor (DF) measured under the following conditions:

1 MHz \pm 100 kHz and 1.0 V_{rms} \pm 0.2 V if capacitance \leq 1,000 pF

1 kHz \pm 50 Hz and 1.0 V_{rms} \pm 0.2 V if capacitance > 1,000 pF

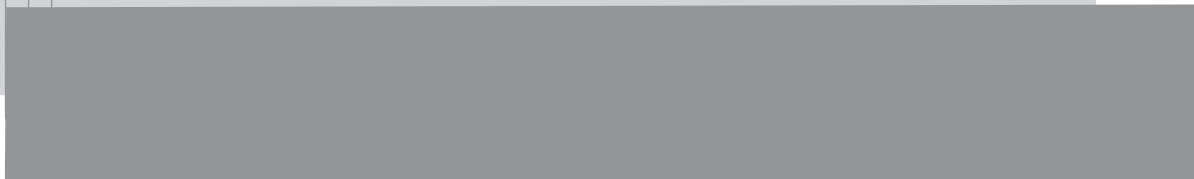
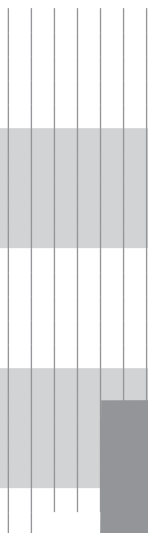
³ To obtain IR limit, divide MΩ-μF value by the capacitance and compare to GΩ limit. Select the lower of the two limits.

Note: When measuring capacitance it is important to ensure the set voltage level is held constant. The HP4284 and Agilent E4980 have a feature known as Automatic Level Control (ALC). The ALC feature should be switched to "ON."

**Capacitance range Includes E24 decade values only (i.e., 10, 11, 12, 13, 15, 16, 18, 20, 22, 24, 27, 30, 33, 36, 39, 43, 47, 51, 56, 62, 68, 75, 82, and 91.) KEMET reserves the right to substitute product with an improved temperature characteristic, tighter capacitance tolerance and/or higher voltage capability within the same form factor (configuration and dimensions.) These products are protected under US Patents 7,172,985 and 7,670,981, other patents pending, and any foreign counterparts.*

*Capacitance range Includes E24 decade values only (i.e., 10, 11, 12, 13, 15, 16, 18, 20, 22, 24, 27, 30, 33, 36, 39, 43, 47, 51, 56, 62, 68, 75, 82, and 91.)
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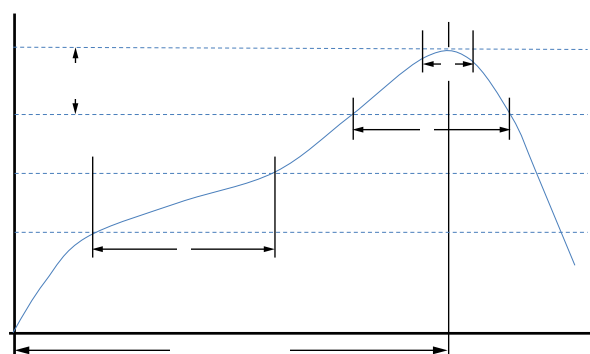
Recommended Soldering Technique:

- Solder wave or solder reflow for EIA case sizes 0603, 0805 and 1206
- All other EIA case sizes are limited to solder reflow only

Recommended Reflow Soldering Profile:

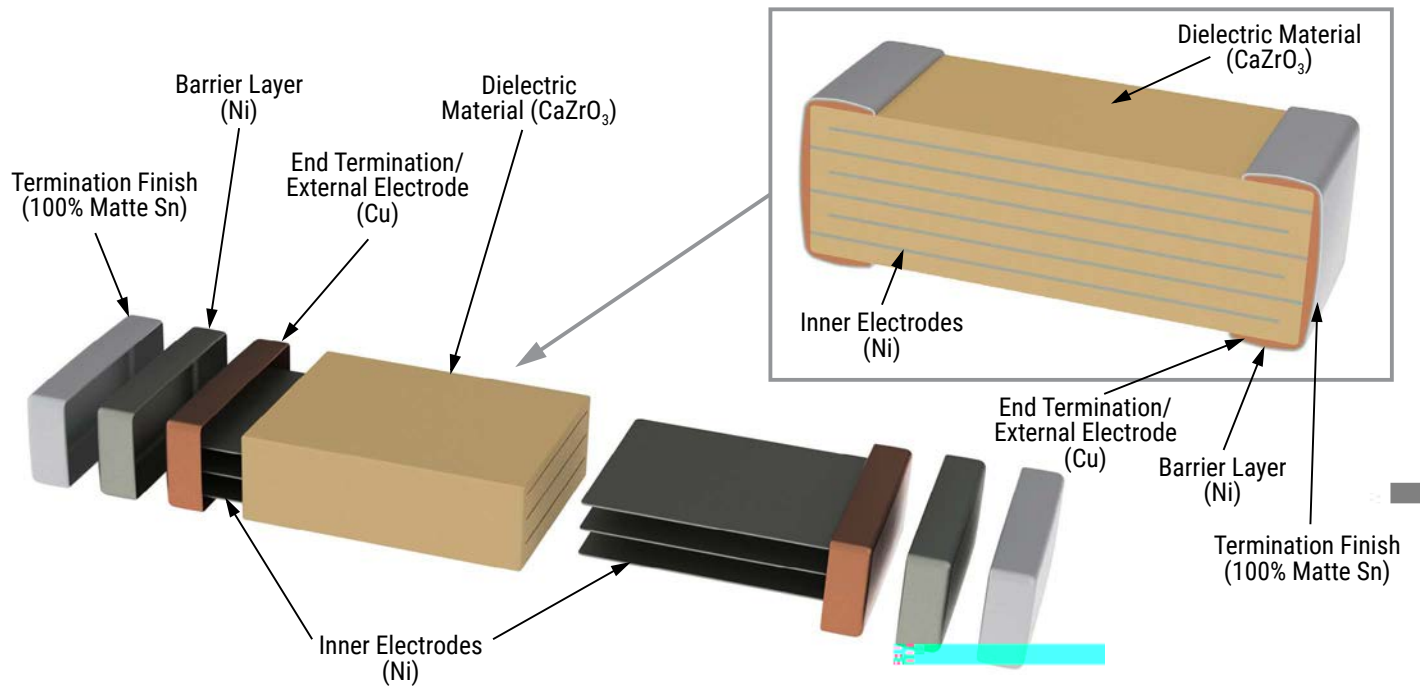
convection, IR or vapor phase reflow techniques. Preheating of these components is recommended to avoid extreme thermal stress. KEMET's recommended profile conditions for convection and IR reflow reflect the profile conditions of the IPC/J-STD-020 standard for moisture sensitivity testing. These devices can safely withstand a maximum of three reflow passes at

Profile Feature		



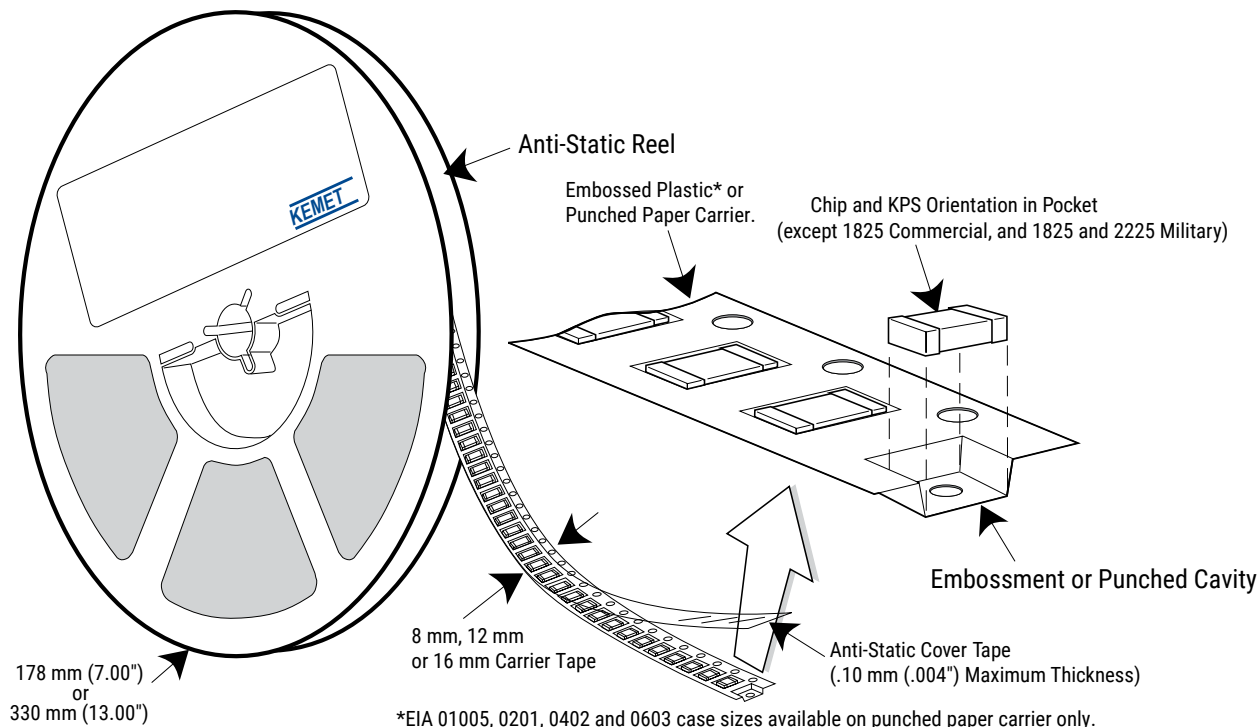
Note 1: All temperatures refer to the center of the package, measured on the capacitor body surface that is facing up during assembly reflow.

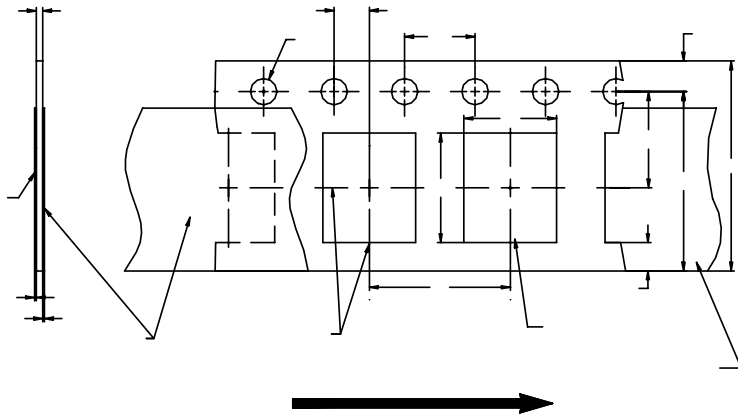
storage humidity not exceed 70% relative humidity. Temperature fluctuations should be minimized to avoid condensation on



Capacitor Marking (Optional):

Laser marking option is not available on:





	1.5+0.10/-0.0 (0.059+0.004/-0.0)						

1. The cavity defined by A_0 , B_0 and T shall surround the component with sufficient clearance that:
 - a) the component does not protrude beyond either surface of the carrier tape.
 - b) the component can be removed from the cavity in a vertical direction without mechanical restriction, after the top cover tape has been removed.
 - c) rotation of the component is limited to 20° maximum (see Figure 3).
 - d) lateral movement of the component is restricted to 0.5 mm maximum (see Figure 4).
 - e) see Addendum in EIA Standard 481 for standards relating to more precise taping requirements.
2. The tape with or without components shall pass around R without damage (see Figure 6).

Packaging Information Performance Notes

'SZIV 8ETI & VIEO * SVGI 1.0 Kg minimum.

'SZIV 8ETI 411BL7 XLSR KLTIP WXVIRKXL SJ XLI GSZIV XETI JVSQ XLI

Tape Width	Peel Strength
8 mm	0.1 to 1.0 Newton (10 to 100 gf)
12 and 16 mm	0.1 to 1.3 Newton (10 to 130 gf)
24 mm	0.1 to 1.6 Newton (10 to 160 gf)

The direction of the pull shall be opposite the direction of the carrier tape travel. The pull angle of the carrier tape shall be 165° to 180° from the plane of the carrier tape. During peeling, the carrier and/or cover tape shall be pulled at a velocity 300±10 mm/minute.

0 E F I P M R K Bar code labeling (standard or custom) shall be on the side of the reel opposite the sprocket hole
7 X E R H E V H W E R H .

Figure 3 – Maximum Component Rotation

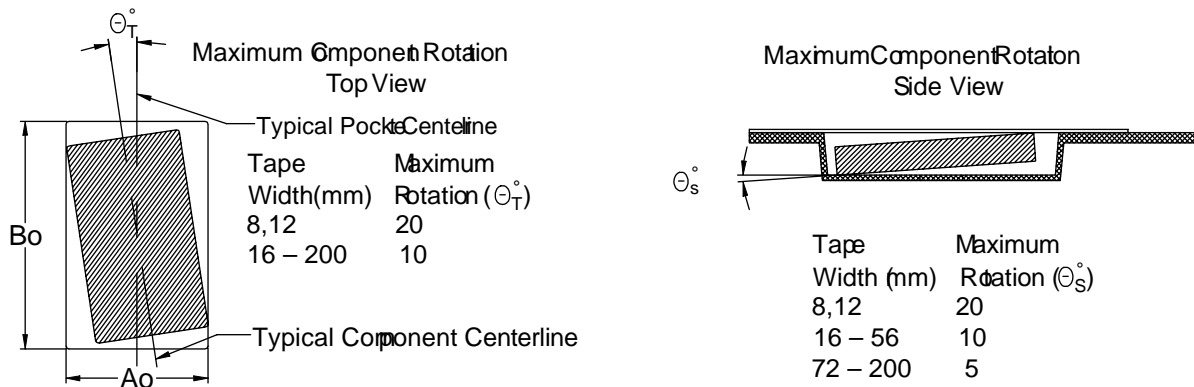


Figure 4 – Maximum Lateral Movement

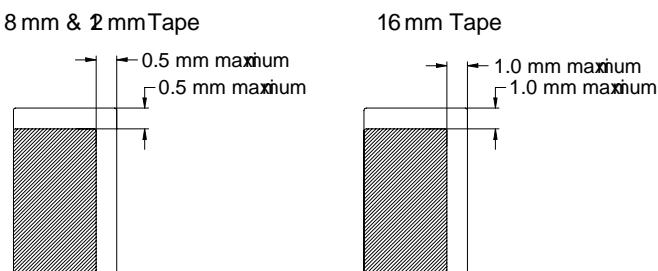
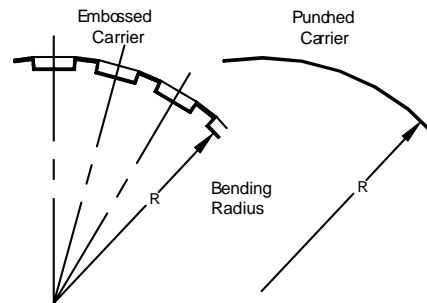
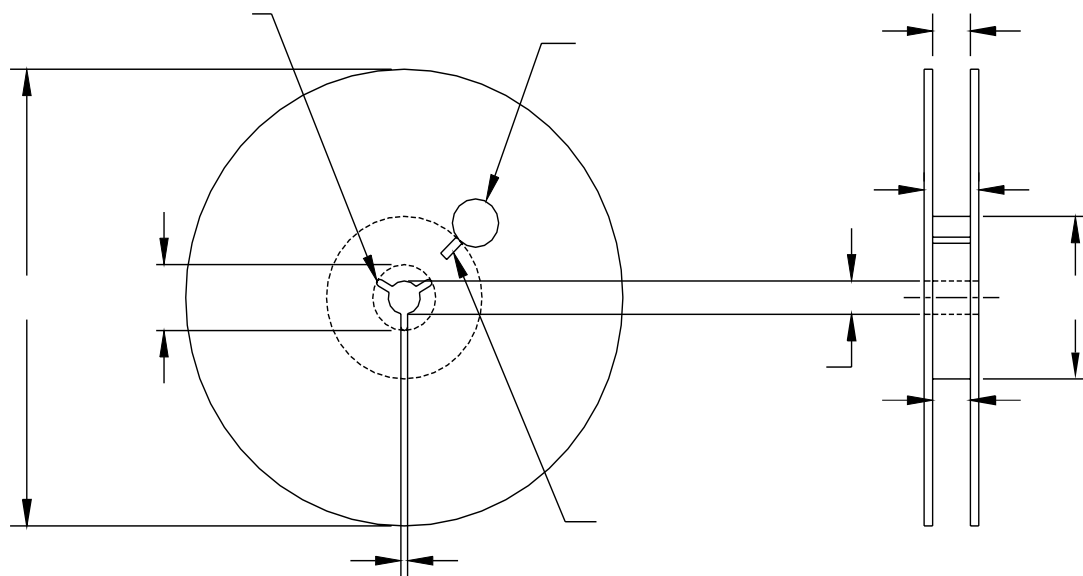
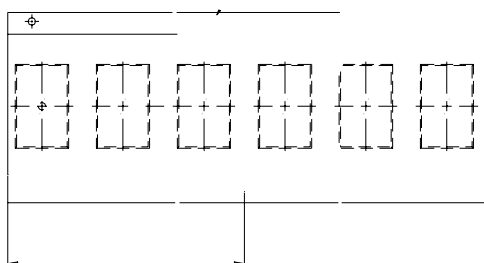


Figure 5 – Bending Radius





			13.0+0.5/-0.2 (0.521+0.02/-0.008)	
			13.0 + -0.2 (0.521 + -0.008)	
		8.4+1.5/-0.0 (0.331+0.059/-0.0)		
		12.4+2.0/-0.0 (0.488+0.078/-0.0)		
		16.4+2.0/-0.0 (0.646+0.078/-0.0)		
		25+1.0/-0.0 (0.984+0.039/-0.0)	27.4+1.0/-1.0 (1.078+0.039/-0.039)	



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applications, but are not intended to constitute – and KEMET specifically disclaims – any warranty concerning suitability for a specific customer application or use.

(such as installation of protective circuitry or redundancies) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or