

# CBR Series, C0G Dielectric, Ultra High Q, Low ESR, 6.3VDC–250VDC (RF & Microwave)

## Overview

KEMET's CBR Series surface mount multilayer ceramic capacitors (MLCCs) in C0G dielectric feature a robust and exceptionally stable copper electrode dielectric system that offers excellent low loss performance (High Q). These devices provide extremely low ESR and high self-resonance characteristics, and are well-suited for resonant circuit applications or those where Q and stability of capacitance characteristics are required. CBR Series capacitors exhibit no change in capacitance with respect to time and voltage and boast a negligible change in capacitance with reference to ambient temperature. Capacitance change is limited to  $\pm 30$ ppm/ $^{\circ}$ C from  $-55^{\circ}$ C to  $+125^{\circ}$ C.

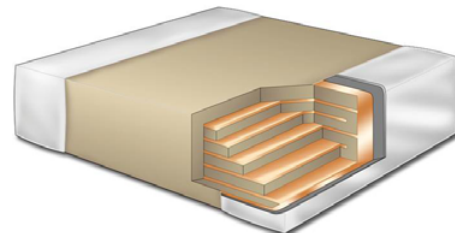
CBR Series devices are suitable for many circuit applications including RF power amplifiers, mixers, oscillators, low noise amplifiers, filter networks, antenna tuning, timing circuits, delay lines and MRI imaging coils.



## Benefits

- $-55^{\circ}$ C to  $+125^{\circ}$ C operating temperature range
- Ultra high Q
- Base metal electrode (BME) dielectric system
- Pb-Free and RoHS compliant
- 0201, 0402, 0603 and 0805 case sizes (inches)
- DC voltage ratings of 6.3V, 10V, 25V, 50V, 100V and 250V
- Capacitance offerings ranging from 0.1pF up to 100pF
- Available capacitance tolerances of  $\pm 0.05$ pF,  $\pm 0.1$ pF,  $\pm 0.25$ pF,  $\pm 0.5$ pF,  $\pm 1\%$ ,  $\pm 2\%$ ,  $\pm 5\%$  and  $\pm 10\%$
- No piezoelectric noise
- Low ESR

- High thermal stability
- No capacitance change with respect to applied rated DC voltage
- Negligible capacitance change with respect to temperature
- No capacitance decay with time
- Non-polar device, minimizing installation concerns
- 100% pure matte tin-plated termination finish allowing for excellent solderability

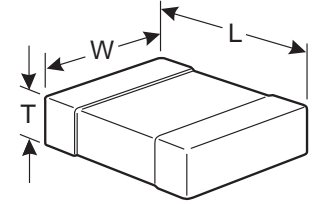


## Ordering Information

CBR	02	C	330	F	9	G	A	C	
Series	Case Size (L"x W")	Specification/ Series	Capacitance Code (pF)	Capacitance Tolerance	Voltage	Dielectric	Termination Style	Termination Finish	Packaging/Grade (C-Spec) <sup>1</sup>
CBR	02 = 0201 04 = 0402 06 = 0603 08 = 0805	C = Standard	2 Sig. Digits + Number of Zeros Use 9 for 1.0 - 9.9pF Use 8 for 0.5 - .99pF ex. 2.2pF = 229 ex. 0.5pF = 508	A = $\pm 0.05$ pF B = $\pm 0.1$ pF C = $\pm 0.25$ pF D = $\pm 0.5$ pF F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$	9 = 6.3V 8 = 10V 3 = 25V 5 = 50V 1 = 100V A = 250V	G = C0G	A = N/A	C = 100% Matte Sn	Blank = 7" Reel Unmarked

<sup>1</sup> When ordering CBR series devices, a "suffix" or "Cspec" is not required to indicate a 7" reel packaging option. CBR devices are only available and shipped on 7" reels (paper tape). Bulk bag and cassette packaging options are not available. Please contact KEMET if you have a specific, non-standard packaging requirement.

## Dimensions – Millimeters (Inches)



Case Size (in.)	Case Size (mm)	L Length	W Width	T Thickness	B Bandwidth	Mounting Technique
0201	0603	0.60 ± 0.03 (0.024 ± 0.001)	0.30 ± 0.03 (0.012 ± 0.001)	0.30 ± 0.03 (0.012 ± 0.001)	0.15 ± 0.05 (0.006 ± 0.002)	Solder Reflow Only
0402	1005	1.00 ± 0.05 (0.040 ± 0.002)	0.50 ± 0.05 (0.020 ± 0.002)	0.50 ± 0.05 (0.020 ± 0.002)	0.25 + 0.05 / -0.10 (0.010 + 0.002 / -0.004)	
0603	1608	1.60 ± 0.10 (0.063 ± 0.004)	0.80 ± 0.10 (0.031 ± 0.004)	0.80 ± 0.07 (0.031 ± 0.003)	0.40 ± 0.15 (0.016 ± 0.006)	Solder Wave or Solder Reflow
0805	2012	2.00 ± 0.20 (0.079 ± 0.008)	1.25 ± 0.20 (0.049 ± 0.008)	0.85 ± 0.10 (0.031 ± 0.004)	0.50 ± 0.20 (0.020 ± 0.008)	

## Applications

Typical applications include critical timing, tuning, bypass, coupling, feedback, filtering, impedance matching and DC blocking.

Field applications include wireless and cellular base stations, wireless LAN, subscriber-based wireless services, wireless broadcast equipment, satellite communications, RF power amplifier (PA) modules, filters, voltage-controlled oscillators (VCOs), PAs, matching networks, RF modules, and medical electronics.

## Qualification

RF and microwave products are subject to internal qualification. Details regarding test methods and conditions are referenced in Table 4, Performance & Reliability.

## Electrical Parameters/Characteristics

Item	Parameters/Characteristics
Operating Temperature Range:	-55°C to +125°C
Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC)	0 ± 30 ppm/°C (0 ± 60 ppm/°C for 0201 case size product ≥ 22pF)
Aging Rate (Max % Cap Loss/Decade Hour)	0%
Dielectric Withstanding Voltage (DWV)	See Dielectric Withstanding Voltage Table (5 ± 1 seconds and charge/discharge not exceeding 50mA)
Quality Factor (Q)	≥ 1000 for capacitance values ≥ 30pF ≥ 400 + 20C for capacitance values < 30pF
Insulation Resistance (IR) Limit @ 25°C	10GΩ minimum (rated voltage applied for 120 ± 5 secs)

Capacitance and Quality Factor (Q) measured at 25°C and 30-70% relative humidity under the following conditions:

1MHz ± 100kHz and 1.0 ± 0.2 Vrms if capacitance ≤ 1000pF

1kHz ± 100Hz and 1.0 ± 0.2 Vrms if capacitance > 1000pF

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

## Dielectric Withstanding Voltage Table

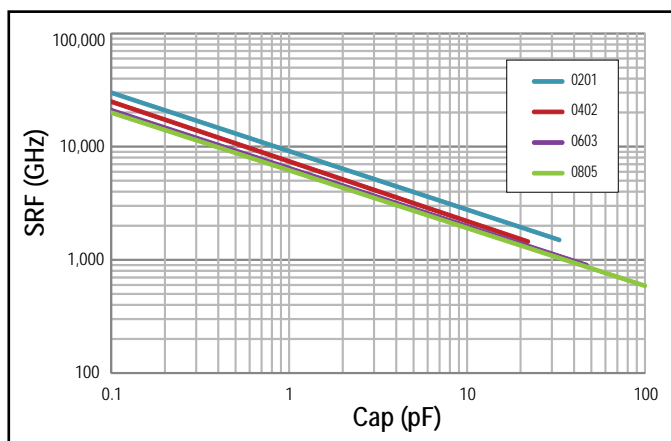
Rated Voltage (VDC)	≤100V	250V
DWV	250%	200%

## Environmental Compliance

Pb-Free and RoHS compliant.

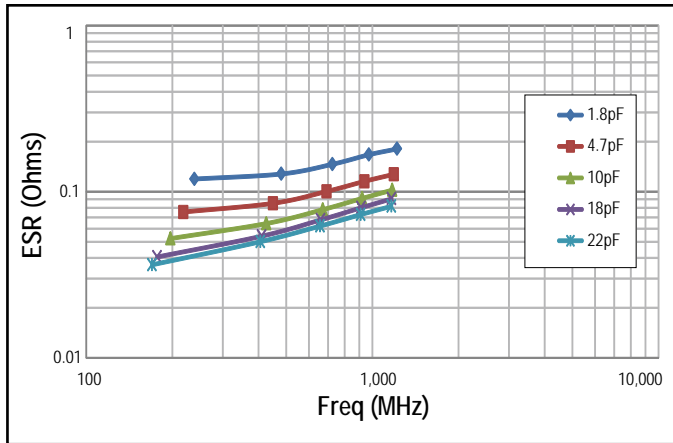
## Electrical Characteristics

SRF (GHz) vs. Cap (pF)

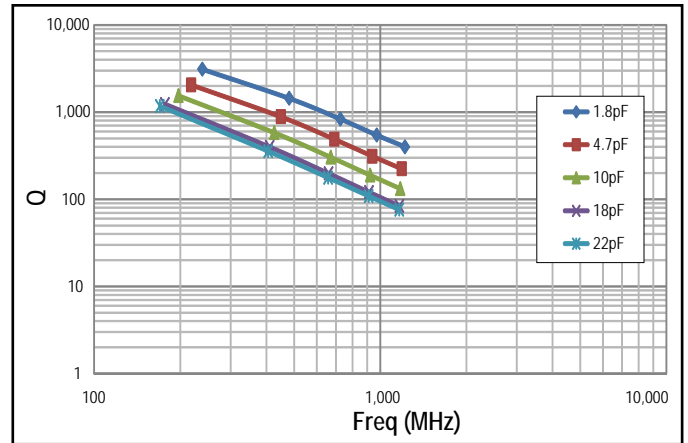


## Electrical Characteristics con't

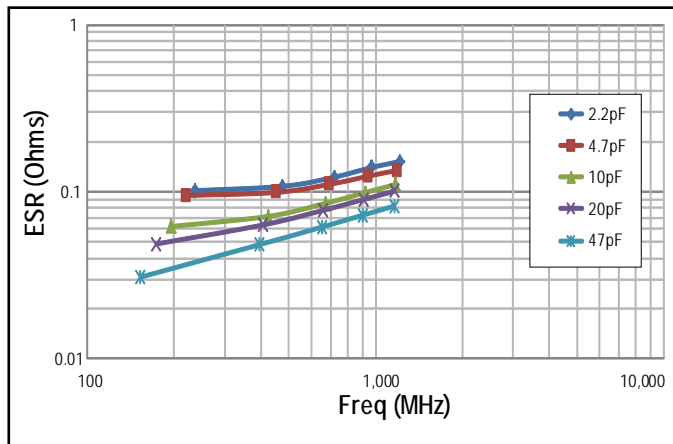
### ESR vs. Frequency 0402



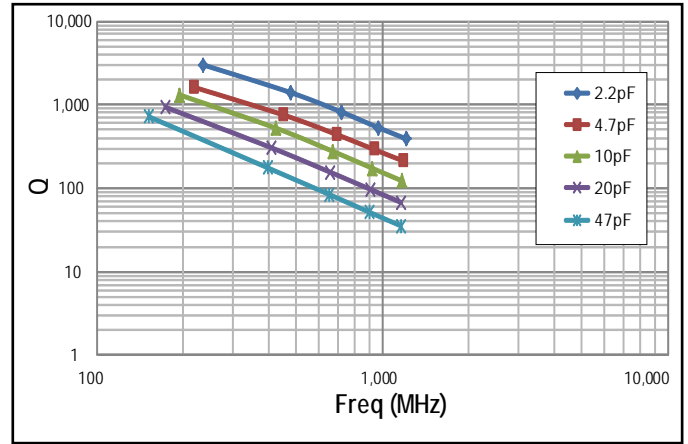
### Q vs. Frequency 0402



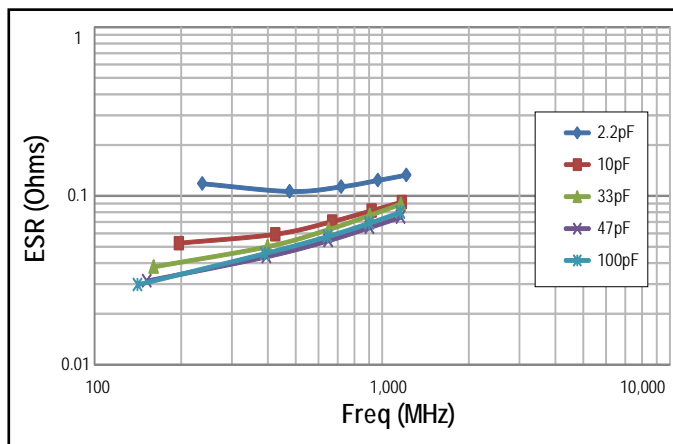
### ESR vs. Frequency 0603



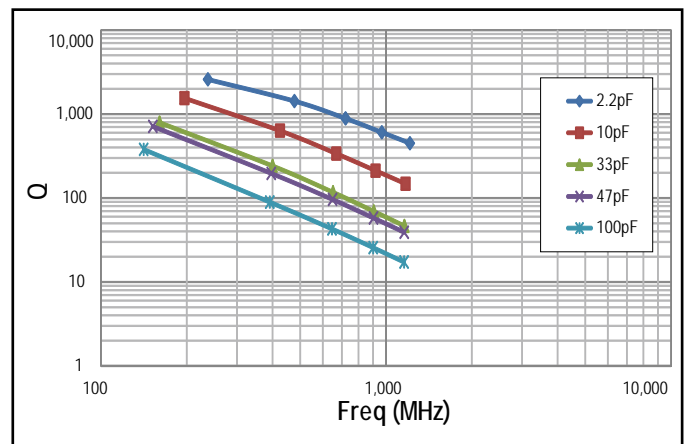
### Q vs. Frequency 0603



### ESR vs. Frequency 0805



### Q vs. Frequency 0805



**Table 1 – CBR Series, Product Offering (0201–0805 Case Sizes) SAMPLE**

Style/Size	0201 (0603)			0402 (1005)		0603 (1608)			0805 (2012)			Cap Tol
Size Code	02			04		06			08			
Length (mm)	0.60 ± 0.03			1.00 ± 0.05		1.60 ± 0.10			2.00 ± 0.20			
Width (mm)	0.30 ± 0.03			0.50 ± 0.05		0.80 ± 0.10			1.25 ± 0.20			
Thickness (mm)	0.30 ± 0.03			0.50 ± 0.05		0.80 ± 0.07			0.85 ± 0.10			
Bandwidth (mm)	0.15 ± 0.05			0.25 + 0.05 / -0.10		0.40 ± 0.15			0.50 ± 0.20			
Voltage Code	9	8	3	5	1	5	1	A	5	1	A	
Rated Voltage (VDC)	6.3	10	25	50	100	50	100	250	50	100	250	
Capacitance	Available Capacitance / Capacitance Code											
0.1 pF	108	108	108	108	108							B
0.2 pF	208	208	208	208	208							A, B
0.3 pF	308	308	308	308	308	308	308	308	308	308	308	A, B
0.4 pF	408	408	408	408	408	408	408	408	408	408	408	A, B
0.5 pF	508	508	508	508	508	508	508	508	508	508	508	A, B
0.6 pF	608	608	608	608	608	608	608	608	608	608	608	A, B, C
0.7 pF	708	708	708	708	708	708	708	708	708	708	708	A, B, C
0.8 pF	808	808	808	808	808	808	808	808	808	808	808	A, B, C
0.9 pF	908	908	908	908	908	908	908	908	908	908	908	A, B, C
1.0 pF	109	109	109	109	109	109	109	109	109	109	109	A, B, C
1.2 pF	129	129	129	129	129	129	129	129	129	129	129	A, B, C
1.5 pF	159	159	159	159	159	159	159	159	159	159	159	A, B, C
1.8 pF	189	189	189	189	189	189	189	189	189	189	189	A, B, C
2.0 pF	209	209	209	209	209	209	209	209	209	209	209	A, B, C
2.2 pF	229	229	229	229	229	229	229	229	229	229	229	A, B, C
2.7 pF	279	279	279	279	279	279	279	279	279	279	279	A, B, C
3.0 pF	309	309	309	309	309	309	309	309	309	309	309	A, B, C
3.3 pF	339	339	339	339	339	339	339	339	339	339	339	A, B, C
3.9 pF	399	399	399	399	399	399	399	399	399	399	399	A, B, C
4.0 pF	409	409	409	409	409	409	409	409	409	409	409	A, B, C
4.7 pF	479	479	479	479	479	479	479	479	479	479	479	A, B, C
5.0 pF	509	509	509	509	509	509	509	509	509	509	509	A, B, C
5.6 pF	569	569	569	569	569	569	569	569	569	569	569	A, B, C
6.0 pF	609	609	609	609	609	609	609	609	609	609	609	A, B, C
6.8 pF	689	689	689	689	689	689	689	689	689	689	689	A, B, C
7.0 pF	709	709	709	709	709	709	709	709	709	709	709	B, C, D
8.0 pF	809	809	809	809	809	809	809	809	809	809	809	B, C, D
8.2 pF	829	829	829	829	829	829	829	829	829	829	829	B, C, D
9.0 pF	909	909	909	909	909	909	909	909	909	909	909	B, C, D
10 pF	100	100	100	100	100	100	100	100	100	100	100	B, C, D
11 pF	110	110	110	110	110	110	110	110	110	110	110	B, C, D
12 pF	120	120	120	120	120	120	120	120	120	120	120	B, C, D
13 pF	130	130	130	130	130	130	130	130	130	130	130	B, C, D
15 pF	150	150	150	150	150	150	150	150	150	150	150	F, G, J
16 pF	160	160	160	160	160	160	160	160	160	160	160	F, G, J
18 pF	180	180	180	180	180	180	180	180	180	180	180	F, G, J
20 pF	200	200		200	200	200	200	200	200	200	200	F, G, J
22 pF	220	220		220	220	220	220	220	220	220	220	F, G, J
24 pF	240	240			240	240	240	240	240	240	240	F, G, J
27 pF	270	270			270	270	270	270	270	270	270	F, G, J
30 pF	300	300			300	300	300	300	300	300	300	F, G, J
33 pF	330	330			330	330	330	330	330	330	330	F, G, J
36 pF					360	360	360	360	360	360	360	F, G, J
39 pF					390	390	390	390	390	390	390	F, G, J
43 pF					430	430	430	430	430	430	430	F, G, J
47 pF						470	470	470	470	470	470	F, G, J
56 pF									560	560	560	F, G, J
68 pF									680	680	680	F, G, J
82 pF									820	820	820	F, G, J
100 pF									101	101	101	F, G, J
Rated Voltage (VDC)	6.3	10	25	50	100	50	100	250	50	100	250	Cap Tol
Voltage Code	9	8	3	5	1	5	1	A	5	1	A	Cap Tol

**Table 2 – Chip Thickness/Reeling Quantities**

Chip Size in. (mm)	Chip Thickness (mm)	Reel Quantity	
		7" Paper	13" Paper
0201 (0603)	0.30 ± 0.03	15,000	Contact KEMET for availability.
0402 (1005)	0.50 ± 0.05	10,000	
0603 (1608)	0.80 ± 0.07	4,000	
0805 (2012)	0.85 ± 0.10	4,000	

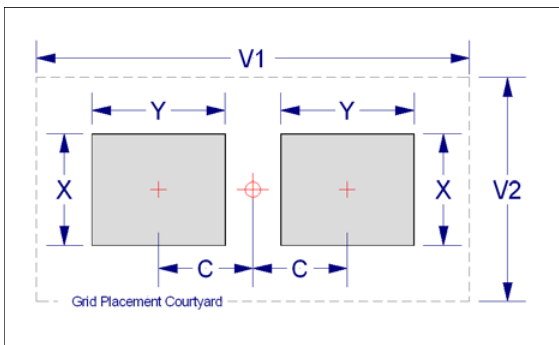
**Table 3 – Chip Capacitor Land Pattern Design Recommendations per IPC-7351 (mm)**

Case Size (in.)	Case Size (mm)	Density Level A: Maximum (Most) Land Protrusion					Density Level B: Median (Nominal) Land Protrusion					Density Level C: Minimum (Least) Land Protrusion				
		C	Y	X	V1	V2	C	Y	X	V1	V2	C	Y	X	V1	V2
0201	0603	0.38	0.56	0.52	1.80	1.00	0.33	0.46	0.42	1.50	0.80	0.28	0.36	0.32	1.20	0.60
0402	1005	0.50	0.72	0.72	2.20	1.20	0.45	0.62	0.62	1.90	1.00	0.40	0.52	0.52	1.60	0.80
0603	1608	0.90	1.15	1.10	4.00	2.10	0.80	0.95	1.00	3.10	1.50	0.60	0.75	0.90	2.40	1.20
0805	2012	1.00	1.35	1.55	4.40	2.60	0.90	1.15	1.45	3.50	2.00	0.75	0.95	1.35	2.80	1.70

**Density Level A:** For low-density product applications. Recommended for wave solder applications and provides a wider process window for reflow solder processes. KEMET only recommends wave soldering of 0603(1608) and 0805(2012) case sizes.

**Density Level B:** For products with a moderate level of component density. Provides a robust solder attachment condition for reflow solder processes.

**Density Level C:** For high component density product applications. Before adapting the minimum land pattern variations the user should perform qualification testing based on the conditions outlined in IPC standard 7351 (IPC-7351).



## Soldering Process

Recommended Soldering Technique:

- Solder wave or solder reflow for 0603 & 0805 case sizes
- 0201 & 0402 case sizes are limited to solder reflow only

Recommended Soldering Profile:

- KEMET recommends following the guidelines outlined in IPC/JEDEC J-STD-020

Recommended Solder Alloys:

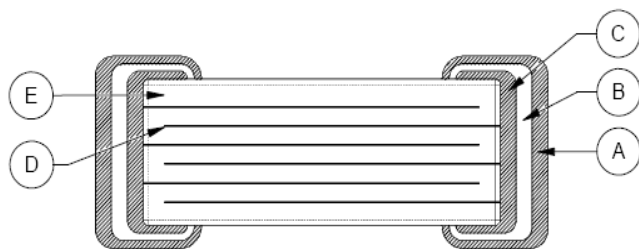
Alloy	Composition	Solidus	Liquidous
In50	50 In, 50 Pb	180°C	209°C
In52	52 In, 48 Sn	118°C	118°C
Sn62	62.5 Sn, 36.1 Pb, 1.4 Ag	179°C	179°C
Sn63	63 Sn, 37 Pb	183°C	183°C
Pb-Free	95.5 Sn, 3.8 Ag, 0.7 Cu	217°C	217°C
Hi-Temp	5 Sn, 93.5 Pb, 1.5 Ag	296°C	301°C
Sn5	5 Sn, 95 Pb	308°C	312°C

**Table 4 – Performance & Reliability: Test Methods & Conditions**

Stress	Test or Inspection Method	Requirements															
Terminal Strength	Pressurizing force: 0201 case size: 2N 0402 & 0603 case sizes: 5N 0805 case size: 10N Test time: 10 ± 1 sec.	No visible damage or separation of termination system.															
Vibration Resistance	Vibration frequency: 10 ~ 55 Hz/min. Total amplitude: 1.5mm Test time: 6 hrs. (Two hrs. each in three mutually perpendicular directions.)	No visible damage. Cap change and Q/DF: To meet initial spec.															
Solderability	Solder temperature: 235 ± 5°C Dipping time: 2 ± 0.5 sec.	95% min. coverage of termination finish.															
Board Flex	Capacitor is mounted to a substrate which is flexed by means of ram at a rate of 1mm per second until the deflection becomes 1 mm. (Deflection is maintained for 5 ± 1 sec.) Store at room temperature for 24 ± 2 hrs. before measuring electrical properties.	No visible damage. Cap change: within ± 5.0% or ± 0.5pF, whichever is larger. (Capacitance change is monitored during flexure.)															
Resistance to Soldering Heat	Solder temperature: 260 ± 5°C Dipping time: 10 ± 1 sec Preheating: 120 to 150°C for 1 minute before immerse the capacitor in a eutectic solder. Store at room temperature for 24 ± 2 hrs. before measuring electrical properties.	No visible damage. Cap change: within ± 2.5% or ± 0.25pF, whichever is larger. Q/DF, IR and dielectric strength: To meet initial requirements. 25% max. leaching on each edge.															
Temperature Cycling	5 cycles of steps 1 - 4: <table border="1" data-bbox="367 1024 886 1215"> <thead> <tr> <th>Step</th> <th>Temp. (°C)</th> <th>Time (min.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Min. operating temp. +0/-3</td> <td>30 ± 3</td> </tr> <tr> <td>2</td> <td>Room temp</td> <td>2 ~ 3</td> </tr> <tr> <td>3</td> <td>Max. operating temp. +3/-0</td> <td>30 ± 3</td> </tr> <tr> <td>4</td> <td>Room temp (25°C)</td> <td>2 ~ 3</td> </tr> </tbody> </table> Store at room temperature for 24 ± 2 hrs. before measuring electrical properties.	Step	Temp. (°C)	Time (min.)	1	Min. operating temp. +0/-3	30 ± 3	2	Room temp	2 ~ 3	3	Max. operating temp. +3/-0	30 ± 3	4	Room temp (25°C)	2 ~ 3	No visible damage. Cap change: within ± 2.5% or ± 0.25pF, whichever is larger. Q/DF, IR and dielectric strength: To meet initial requirements.
Step	Temp. (°C)	Time (min.)															
1	Min. operating temp. +0/-3	30 ± 3															
2	Room temp	2 ~ 3															
3	Max. operating temp. +3/-0	30 ± 3															
4	Room temp (25°C)	2 ~ 3															
Humidity (Damp Heat) Steady State	Test temperature: 40 ± 2°C Humidity: 90 ~ 95% RH Test time: 500 + 24/-0hrs. Store at room temperature for 24 ± 2 hrs. before measuring electrical properties.	No visible damage. Cap change: within ± 5.0% or ± 0.5pF, whichever is larger. Q/DF value: Cap ≥ 30pF, Q ≥ 350, 10pF ≤ Cap < 30pF, Q ≥ 275 + 2.5°C Cap < 10pF, Q ≥ 200+10C IR: ≥ 1GΩ															
Humidity (Damp Heat) Load	Test temperature: 40 ± 2°C Humidity: 90 ~ 95% RH Test time: 500 + 24/-0 hrs. Applied voltage: rated voltage Store at room temperature for 24 ± 2 hrs. before measuring electrical properties.	No visible damage. Cap change: within ± 7.5% or ± 0.75pF, whichever is larger. Q/DF value: Cap ≥ 30pF, Q ≥ 200, Cap < 30pF, Q ≥ 100+10/3C IR: ≥ 500MΩ															
High Temperature Life	Test temperature: 125 ± 3°C Applied voltage: 200% of rated voltage. Test time: 1000 + 24/-0 hrs. Store at room temperature for 24 ± 2 hrs. before measuring electrical properties.	No visible damage. Cap change: within ± 3.0% or ± 0.3pF, whichever is larger. Q/DF value: Cap ≥ 30pF, Q ≥ 350, 10pF ≤ Cap < 30pF, Q ≥ 275 + 2.5°C Cap < 10pF, Q ≥ 200 + 10°C IR: ≥ 1GΩ															



## Construction



Note: Image is exaggerated in order to clearly identify all components of construction

Reference	Item	Material
A	Termination System	Finish
B		Barrier Layer
C		Base metal
D	Inner Electrode	Cu
E	Dielectric Material	BaTiO <sub>3</sub>

## Storage and Handling

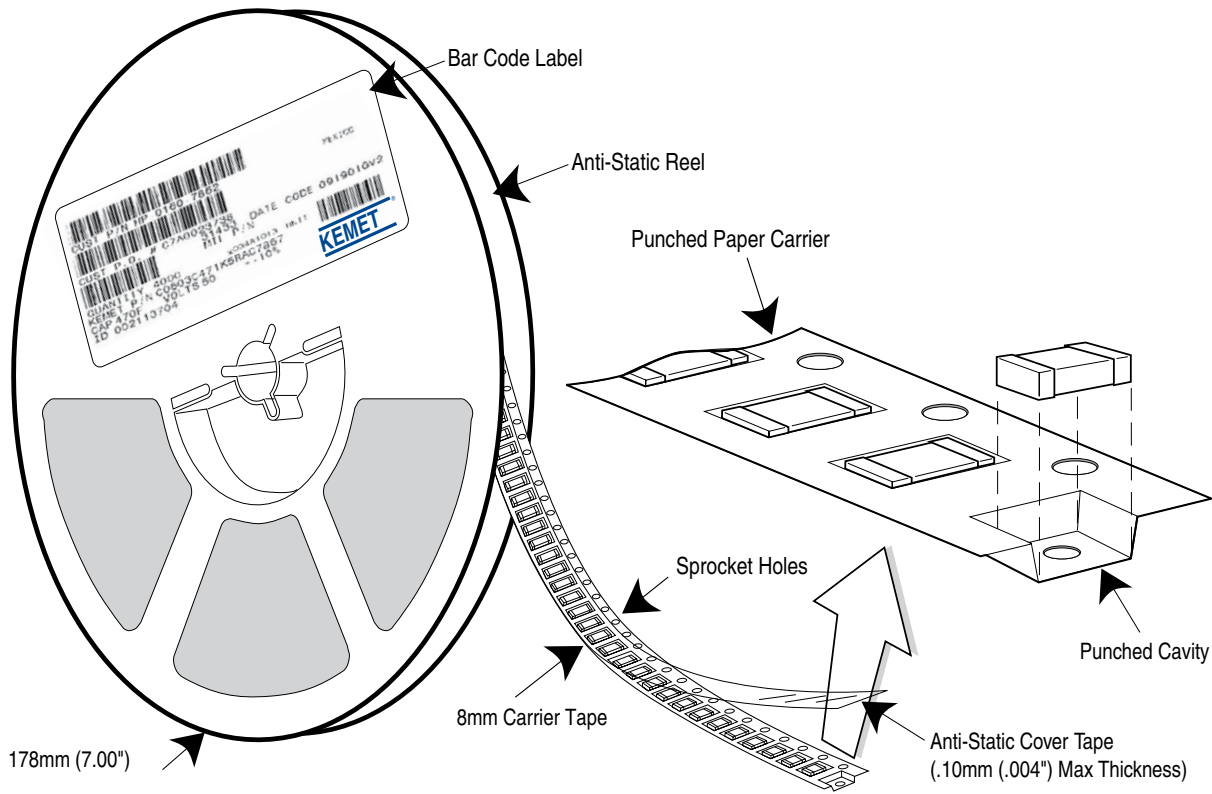
Ceramic chip capacitors should be stored in normal working environments. While the chips themselves are quite robust in other environments, solderability will be degraded by exposure to high temperatures, high humidity, corrosive atmospheres, and long term storage. In addition, packaging materials will be degraded by high temperature – reels may soften or warp, and tape peel force may increase. KEMET recommends that maximum storage temperature not exceed 40°C, and maximum storage humidity not exceed 70% relative humidity. In addition, temperature fluctuations should be minimized to avoid condensation on the parts, and atmospheres should be free of chlorine and sulfur bearing compounds. For optimized solderability, chip stock should be used promptly, preferably within 1.5 years of receipt.

## Marking

CBR series devices are supplied unmarked.

## Tape & Reel Packaging Information

KEMET offers RF and Microwave Multilayer Ceramic Chip Capacitors packaged in 8mm tape on 7" reels. This packaging system is compatible with all tape fed automatic pick and place systems.



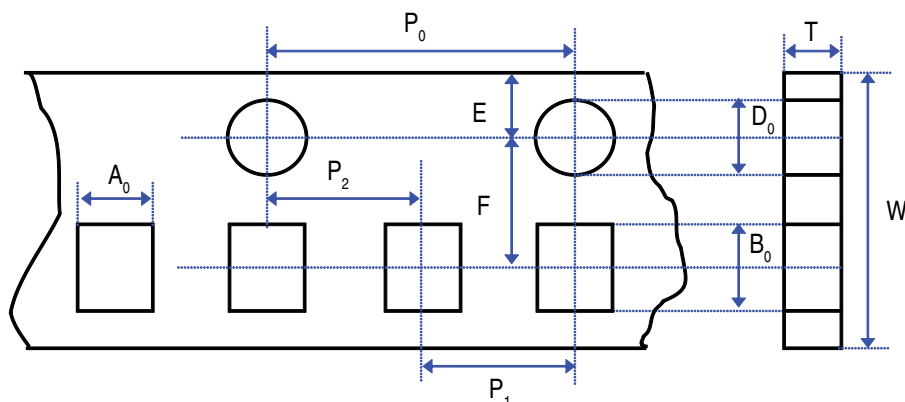
**Table 5 – Carrier Tape Configuration (mm)**

EIA Case Size	Tape Size (W)*	Lead Space (P <sub>1</sub> )*
0201 - 0402	8	2
0603 - 1210	8	4

\*Refer to Figure 1 & 2 for W and P<sub>1</sub> carrier tape reference locations.

\*Refer to Table 6 for tolerance specifications.

**Figure 1 – Punched (Paper) Carrier Tape Dimensions**



**Table 6 – Punched (Paper) Carrier Tape Dimensions**

Metric will govern

Constant Dimensions — Millimeters (Inches)					
Tape Size	$D_0$	$E_1$	$P_0$	$P_2$	R Ref. Note 2
8 mm	$1.55 \pm 0.05$ (0.061 ± 0.002)	$1.55 \pm 0.05$ (0.061 ± 0.002)	$4.0 \pm 0.10$ (0.157 ± 0.004)	$2.0 \pm 0.05$ (0.079 ± 0.002)	25.0 (0.984)
Variable Dimensions — Millimeters (Inches)					
Tape Size	Pitch	F	P1	T	W
8mm	Half (2mm)	$3.5 \pm 0.05$ (0.138 ± 0.002)	$2.0 \pm 0.05$ (0.079 ± 0.002)	$0.42 \pm 0.05$ (0.017 ± 0.002)	$8.0 \pm 0.10$ (0.315 ± 0.004)
				$0.60 \pm 0.05$ (0.024 ± 0.002)	
8mm	Single (4mm)		$4.0 \pm 0.10$ (0.157 ± 0.004)	$0.95 \pm 0.05$ (0.037 ± 0.002)	
				$0.97 \pm 0.05$ (0.038 ± 0.002)	
			$0.75 \pm 0.05$ (0.030 ± 0.002)		

2. The tape with or without components shall pass around R without damage (see Figure 3).

### Packaging Information Performance Notes

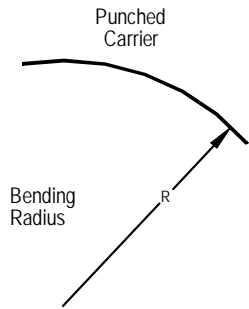
1. **Cover Tape Break Force:** 1.0 Kg Minimum.
2. **Cover Tape Peel Strength:** The total peel strength of the cover tape from the carrier tape shall be:

Tape Width	Peel Strength
8mm	0.1 Newton to 1.0 Newton (10gf to 100gf)
12mm & 16mm	0.1 Newton to 1.3 Newton (10gf to 130gf)

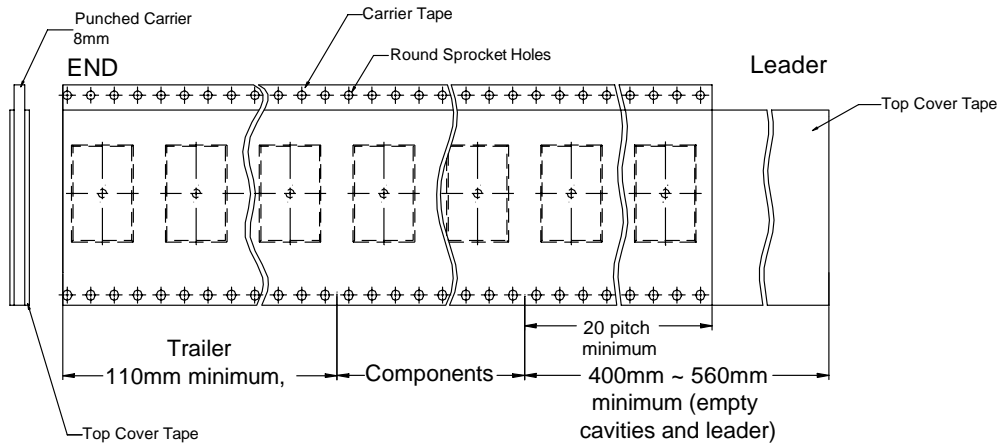
The direction of the pull shall be opposite the direction of the carrier tape travel. The pull angle of the carrier tape shall be 165° to 180° from the plane of the carrier tape. During peeling, the carrier and/or cover tape shall be pulled at a velocity of 300±10 mm/minute.

3. **Labeling:** Bar code labeling (standard or custom) shall be on the side of the reel opposite the sprocket holes. Refer to EIA-556 and EIA-624.

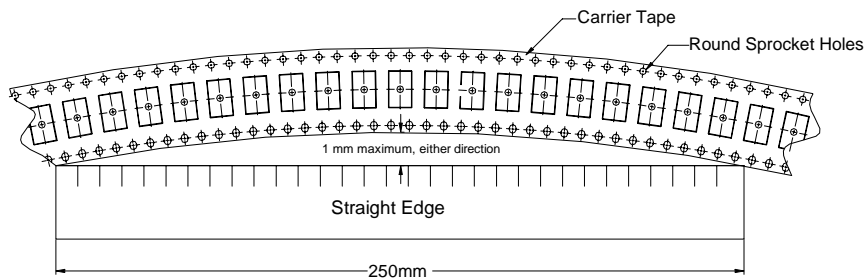
**Figure 2 – Bending Radius**



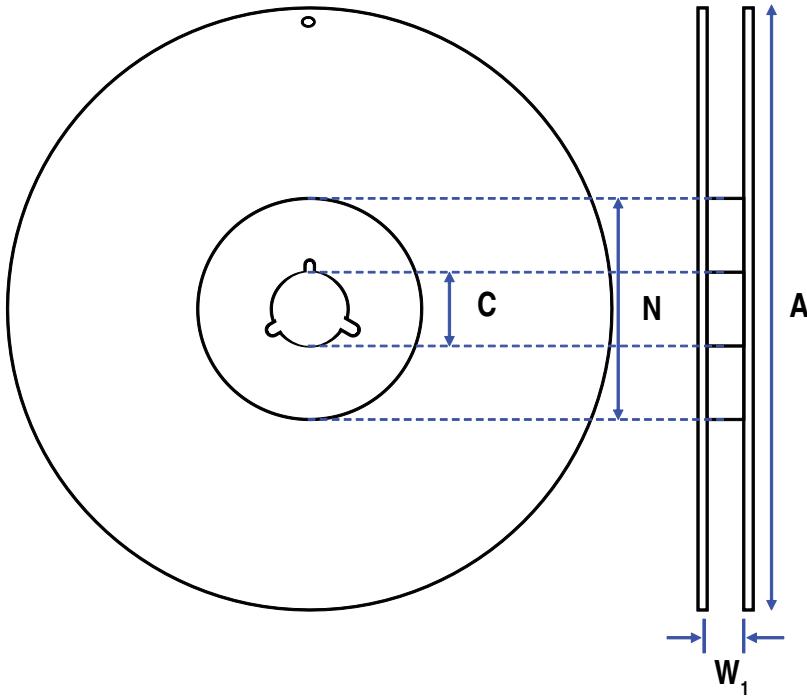
**Figure 3 – Tape Leader & Trailer Dimensions**



**Figure 4 – Maximum Camber**



**Figure 5 – Reel Dimensions**



**Table 7 – Reel Dimensions**

Metric will govern

Constant Dimensions — Millimeters (Inches)			
Tape Size	Reel Size	A	C
8mm	7	178 ± 0.10 (7.008 ± 0.004)	13.0 ± 0.20 (0.512 ± 0.008)
Variable Dimensions — Millimeters (Inches)			
Tape Size	N Min. See Note 2, Table 5	W <sub>1</sub>	
8mm	50 (1.969)	8.4 + 1.5/ -0.0 (0.331 + 0.059/ -0.0)	

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Rome, Italy  
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Weymouth, United Kingdom  
Tel: 44-1305-830747

Coatbridge, Scotland  
Tel: 44-1236-434455

Färjestaden, Sweden  
Tel: 46-485-563934

Espoo, Finland  
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Taipei, Taiwan  
Tel: 886-2-27528585

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Penang, Malaysia  
Tel: 60-4-6430200

Bangalore, India  
Tel: 91-806-53-76817

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## Other KEMET Resources

Tools	
Resource	Location
Configure A Part: CapEdge	<a href="http://capacitoredge.kemet.com">http://capacitoredge.kemet.com</a>
SPICE & FIT Software	<a href="http://www.kemet.com/spice">http://www.kemet.com/spice</a>
Search Our FAQs: KnowledgeEdge	<a href="http://www.kemet.com/keask">http://www.kemet.com/keask</a>

Product Information	
Resource	Location
Products	<a href="http://www.kemet.com/products">http://www.kemet.com/products</a>
Technical Resources (Including Soldering Techniques)	<a href="http://www.kemet.com/technicalpapers">http://www.kemet.com/technicalpapers</a>
RoHS Statement	<a href="http://www.kemet.com/rohs">http://www.kemet.com/rohs</a>
Quality Documents	<a href="http://www.kemet.com/qualitydocuments">http://www.kemet.com/qualitydocuments</a>

Product Request	
Resource	Location
Sample Request	<a href="http://www.kemet.com/sample">http://www.kemet.com/sample</a>
Engineering Kit Request	<a href="http://www.kemet.com/kits">http://www.kemet.com/kits</a>

Contact	
Resource	Location
Website	<a href="http://www.kemet.com">www.kemet.com</a>
Contact Us	<a href="http://www.kemet.com/contact">http://www.kemet.com/contact</a>
Investor Relations	<a href="http://www.kemet.com/ir">http://www.kemet.com/ir</a>
Call Us	1-877-MyKEMET
Twitter	<a href="http://twitter.com/kemetcapacitors">http://twitter.com/kemetcapacitors</a>

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