



Commercial Ceramic Leaded Capacitors

Goldmax & Aximax, 25 – 250 VDC



Why Choose KEMET

KEMET Electronics 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

- COG/NP0, X7R, Z5U, X8L & X8R dielectrics
- Non-polar devices
- High volumetric capacitance with low leakage current
- Low ESR and ESL
- High thermal stability
- RoHS compliant
- Sn/Pb termination available
- Automotive Grade available
- Flex crack resistant
- Improved piezoelectric noise performance over surface mount technology

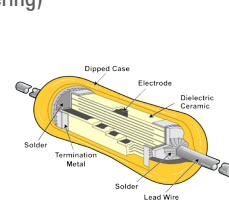
Product Checklist

- What is your lead spacing requirement?
- Do you prefer a coated solution?
- Is there a height restriction?
- Will the capacitor or assembled circuit be submerged in a solvent, compound or solution?
- Are you currently using a capacitor that requires voltage derating?
- What is your capacitance requirement?
- What is your voltage requirement at operating temperature?
- Is mechanical stress, extreme thermal cycling, shock and/or vibration a concern?
- Do you require a specific lead form?

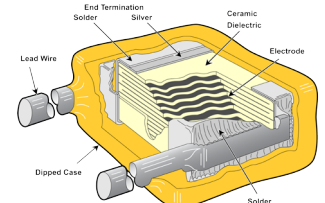
For more information, samples and engineering kits, please visit us at www.kemet.com or call 1.877.myKEMET.

Programs Supported

- Power supply (decoupling and filtering)
- Lighting
- Motor drives
- Automotive
- Industrial process control
- Geothermal probes
- Down-hole oil and gas exploration
- Medical (non-implantable)



Aximax (C4xx)



Goldmax (C3xx)

Electrical/Physical Characteristics

Series	Dielectric	Voltage (VDC)	Capacitance Range	Product Grade	Form Factor	Operating Temperature Range
85°C & 125°C Technology						
C300 Goldmax	COG	50 – 200	1.0 pF – 150 nF	Commercial	Radial Conformally Coated	-55°C to +125°C
	X7R	25 – 250	100 pF – 10 μF			+10°C to +85°C
	Z5U	25 – 250	100 pF – 10 μF	Automotive		-55°C to +125°C
	COG	25 – 250	1.0 pF – 0.22 μF			
C400 Aximax	X7R	25 – 250	100 pF – 10 μF	Commercial	Axial Conformally Coated	-55°C to +125°C
	COG	50 – 200	1.0 pF – 15 nF			+10°C to +85°C
	X7R	25 – 250	100 pF – 4.7 μF	Automotive		-55°C to +125°C
	Z5U	50 – 200	1.0 nF – 2.2 μF			+10°C to +85°C
C400 Aximax	COG	25 – 250	1.0 pF – 0.10 μF	Commercial & Automotive	Axial Conformally Coated	-55°C to +125°C
	X7R	25 – 250	10 pF – 4.7 μF			-55°C to +150°C
150°C Technology						
C400 Aximax	X8L	25 – 250	100 nF – 2.2 μF	Commercial & Automotive	Axial Conformally Coated	-55°C to +150°C
	X8R	50 – 200	10 pF – 82 nF			

Dimension Table - Inches (Millimeters)

Aximax Axial Leaded

Series	Style/Size	Length Maximum	Diameter Maximum	Lead Length Minimum	Characteristics
C41X	410	0.170 (4.32)	0.095 (2.31)	1.0 + 0.001/-003 (25.4 + 0.025/-0.076)	<ul style="list-style-type: none"> • Choose axial when: <ul style="list-style-type: none"> - Height is constrained - Board space is not constrained - Automatic insertion is required • 25 V – 250 V • ±0.1%, ±0.25%, ±0.5%, ±1%, ±2%, ±5%, ±10%, ±20% & -20/+80% capacitance tolerances available
	412	0.170 (4.32)	0.120 (3.05)		
C42X	420	0.200 (5.08)	0.100 (2.54)		
C43X	430	0.240 (6.10)	0.150 (3.81)		
C44X	440	0.260 (6.60)	0.150 (3.81)		

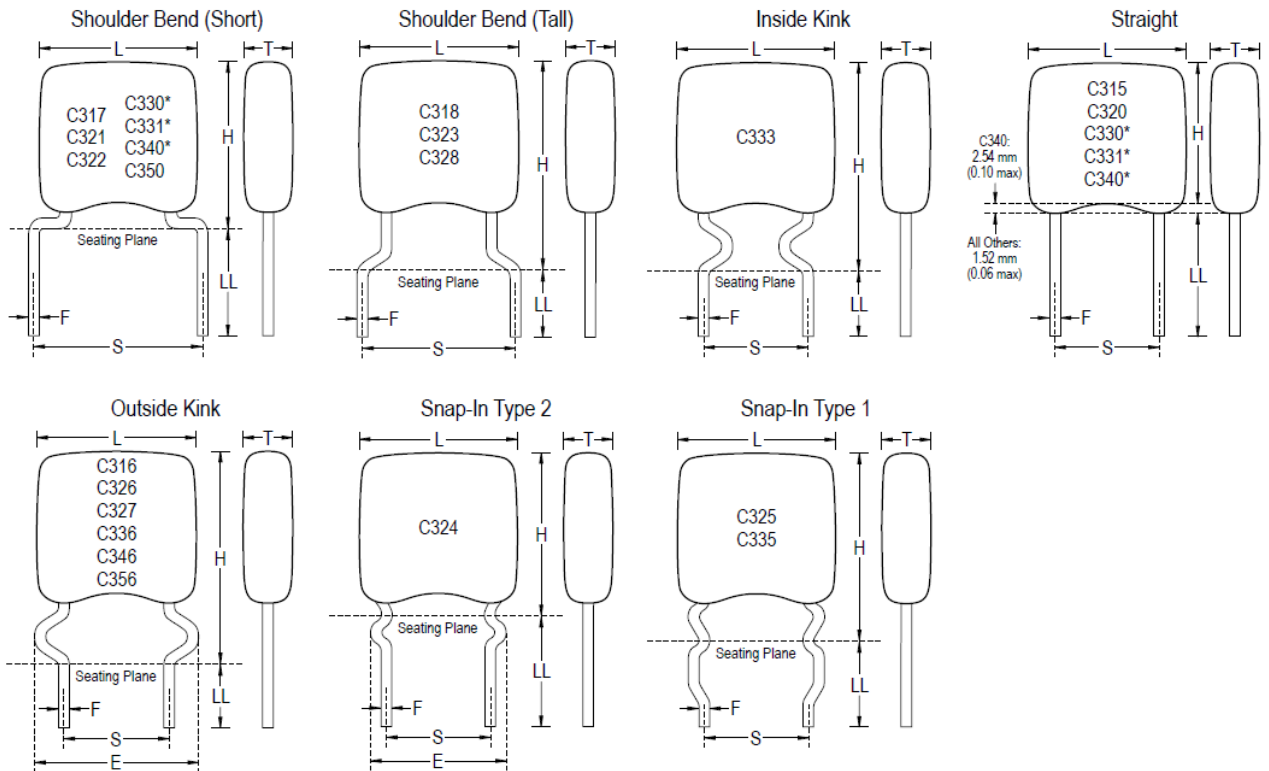


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Dimensions



Dimension Table - Inches (Millimeters)
Goldmax Radial Leaded

Series	Style/Size	L Length Maximum	H Height Maximum	T Thickness Maximum	F Characteristics
C31X	315	0.150 (3.81)	0.120 (3.14)	0.100 (2.54)	<ul style="list-style-type: none"> Choose radial when: <ul style="list-style-type: none"> - There are no height constraints - Smaller footprint is required - Greater distance between component and PCB is required 25 V – 250 V ±0.1%, ±0.25%, ±0.5 pF, ±1%, ±2%, ±5%, ±10%, ±20% & -20/+80% capacitance tolerances available Several lead configurations & spacings available
	316	0.150 (3.81)	0.200 (5.08)	0.100 (2.54)	
C32X	324	0.200 (5.08)	0.230 (5.84)	0.125 (3.18)	
	320	0.200 (5.08)	0.230 (5.84)	0.125 (3.18)	
	326	0.200 (5.08)	0.300 (7.62)	0.125 (3.18)	
C31X	317	0.150 (3.81)	0.200 (5.08)	0.100 (2.54)	
	318	0.150 (3.81)	0.235 (5.97)	0.100 (2.54)	
C32X	321	0.200 (5.08)	0.260 (6.60)	0.125 (3.18)	
	322	0.200 (5.08)	0.230 (5.84)	0.125 (3.18)	
	323	0.200 (5.08)	0.300 (7.62)	0.125 (3.18)	
	325	0.200 (5.08)	0.300 (7.62)	0.125 (3.18)	
	328	0.200 (5.08)	0.300 (7.62)	0.125 (3.18)	
C33X	327	0.200 (5.08)	0.320 (8.13)	0.125 (3.18)	
	330	0.280 (7.11)	0.360 (9.14)	0.160 (4.07)	
	331	0.280 (7.11)	0.360 (9.14)	0.160 (4.07)	
	333	0.280 (7.11)	0.400 (10.16)	0.160 (4.07)	
C34X	335	0.280 (7.11)	0.400 (10.16)	0.160 (4.07)	
	336	0.280 (7.11)	0.400 (10.16)	0.160 (4.07)	
	340	0.290 (7.36)	0.320 (8.13)	0.160 (4.07)	
C35X	346	0.290 (7.36)	0.400 (10.16)	0.160 (4.07)	
	350	0.330 (8.38)	0.400 (10.16)	0.200 (5.08)	
	356	0.330 (8.38)	0.400 (10.16)	0.200 (5.08)	