

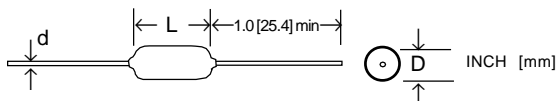
# AXIAL LEAD CERAMIC CAPACITORS MULTILAYER CERAGOLD™ CONSTRUCTION

## CEA SERIES



- ☐ Conformal coated, miniature sizes, 0.3pF - 2.2uF
- ☐ Wide range of capacitance, tolerance, TC, and voltage
- ☐ C0G (NPO), X7R, Z5U and Y5V temperature coefficients
- ☐ Popular values available from stock

RCD's CEA Series features *Ceragold™* high-density multi-layer construction enabling an expanded range of values. Bodies are insulated with a proprietary flame retardant epoxy coating for superior environmental protection and dielectric strength. Non-standard values, increased voltage ratings, custom marking, military screening, cut & formed leads, etc., are available. Matched sets and networks also available. Custom components are an RCD specialty!



### SPECIFICATIONS

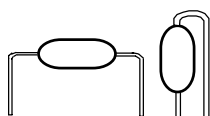
RCD Type	WVDC <sup>1</sup>	CAPACITANCE RANGE			L (Body Length, Max)	D (Body Diameter, Max)	d (Lead Dia)
		C0G (NPO)	X7R	Z5U/Y5V <sup>2</sup>			
CEA05	25	0.3 - 1000pF	100pF - 0.15uF	1000pF - 1.0uF	0.150 [3.8]	.100 [2.54]	.018 ±.003 [0.45 ±.08]
	50	0.3 - 1000pF	100pF- 0.10uF	1000pF - 0.47uF			
	100	0.5 - 820pF	100pF- 0.01uF	1000pF- 0.068uF			
CEA10	25	0.5 - 2700pF	100pF - 0.22uF	1000pF - 1.2uF	0.170 [4.32]	.100 [2.54]	.018 ±.003 [0.45 ±.08]
	50	0.5 - 2200pF	100pF- 0.10uF	1000pF - 1.0uF			
	100	0.5 - 1000pF	100pF- 0.033uF	1000pF- 0.10uF			
CEA12	25	0.5 - 5600pF	100pF - 1.0uF	1000pF - 2.2uF	0.200 [5.1]	.118 [3.0]	.018 ± .003 [0.45 ± .08]
	50	0.5 - 4700pF	100pF- 0.47uF	1000pF - 1.0uF			
	100	0.5 - 3300pF	100pF- 0.10uF	1000pF- 0.10uF			

### DIELECTRIC CHARACTERISTICS (typical)

ITEM	C0G (NPO)	X7R	Y5V (Z5U) <sup>2</sup>
Cap. Range, E12 values	0.3 pF - 5,600 pF	100 pF - 1uF	1,000 pF - 2.2uF
Capacitance Tolerance	<10pF: ±1pF, .25pF, .5pF (std) ≥10pF: ±1%, ±2%, ±5%(std), ±10%	±5%, ±10% (std), ±20%	±20% (std), +80/- 20%
Operating Temperature Range	-55°C to +125°C	-55°C to +125°C	-30°C to +85°C
Temperature Characteristics	0 ± 30ppm/°C <sup>3</sup>	±15% max over op.temp range	+22%/-82% (+22%/-56%) max over operating temp range
Aging (cap loss/decade hr)	negligible	2%	7%
Voltage Coef (ΔC@ max V)	negligible	-50% to +10% typ	-80% to +20% typ
Dissipation Factor (1KHz)	0.15% (+25°C & +125°C) 1.0VRMS, 1MHz for values <1000pF	2.5% Max., 1VRMS	4.0% Max. 0.5 VRMS
Insulation Resistance 25°C (MIL-STD-202-METHOD-302)	100GΩ or 1000MΩ-uF whichever is less	100GΩ or 1000MΩ-uF whichever is less	10GΩ or 1000MΩ-uF whichever is less
Dielectric Strength	2.5x rated VDC	2.5x rated VDC	2.5x rated VDC
Life Test (1000 hours)	2x rated voltage @ +125°C ΔC < 3% or 0.25pF wig	2x rated voltage at +125°C ΔC < 20%	1.5x rated voltage at +85°C ΔC < 30%

### Cut & Forming

Wide range of styles and sizes available... horizontal, vertical mount, snap-in kinks, etc. Consult factory.



#### Footnotes:

- <sup>1</sup> Expanded range available, consult factory
- <sup>2</sup> Y5V is standard, Z5U is avail. (Y5V & Z5U are considered interchangeable)
- <sup>3</sup> ±60ppm <10pF

### P/N DESIGNATION: CEA10 - 102 - J 101 G T W

**RCD Type** CEA10  
**Option Code:** (leave blank if standard)  
**Capacitance Code** 2 significant digits & multiplier:  
 R5=0.5pF, 1R0=1pF, 100=10pF, 101=100pF, 102=1000pF,  
 103=.01uF (10,000pF), 104=.1uF(100,000pF), 105=1uF  
**Tolerance:** F=1%, G=2%, J=5%, K=10%, M=20%,  
 Z=+80%/-20%, B=±0.1pF, C=±0.25pF, D=±0.5pF  
**Voltage Code:** 025=25V, 050=50V, 101=100V, 201=200V  
**Dielectric:** G=COG(NPO), R=X7R, V=Y5V (U=Z5U)  
**Packaging:** B=Bulk, A=Ammo, T=Tape & Reel (5K pcs/reel typ)  
**Termination:** W= Lead-free, Q= Tin/Lead  
 (leave blank if either is acceptable)