RESISTORS•CAPACITORS•COILS•DELAY LINES

RADIAL LEAD CERAMIC CAPACITORS
MULTILAYER *CERAGOLD*™ CONSTRUCTION
CER SERIES

RoHS Term.W is RoHS compliant & 260°C compatible



- ❒ Industry's widest range- 0.47pF to 10uF, tolerances to 1%
- ❒ Space-saving radial lead design
- ❒ COG (NPO), X7R, Z5U and Y5V temperature coefficients
- ❒ Tape and reel packaging available
- ❒ Standard industry sizes
- ❒ High voltage models available
- ❒ Cut and formed leads available

RCD's *Ceragold*™ high-density multilayer construction enables superior performance and capacitance range. Proprietary flame retardant epoxy coating ensures optimum 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!

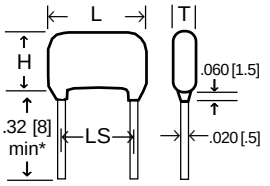
DIMENSIONS

RCD Type	L Max.	H Max.	T Max.	LS ±.024 [0.6]
CER15	.165 [4.2]	.150 [3.81]	.150 [3.81]	.100 [2.5]
CER17	.150 [3.81]	.150 [3.81]	.150 [3.81]	.200 [5.0]
CER20	.200 [5.08]	.200 [5.08]	.150 [3.81]	.100 [2.5]
CER22	.200 [5.08]	.200 [5.08]	.150 [3.81]	.200 [5.0]
CER30	.300 [7.62]	.217 [5.5]	.150 [3.80]	.200 [5.0]
CER40	.413 [10.5]	.394 [10]	.165 [4.2]	.217 [5.5]
CER50	.492 [12.5]	.433 [11]	.165 [4.2]	.295 [7.5]

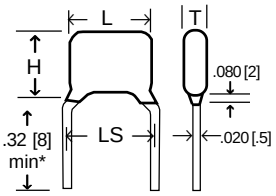
*Body thickness varies with capacitance value

BODY STYLE (additional styles available)

CER15, 20, 30, 40, 50



CER17, CER22



* Longer leads available, consult factory

DIELECTRIC CHARACTERISTICS (typical)

ITEM	COG (NPO)	X7R	Y5V (Z5U) [2]
Cap. Range, E12 values	0.47 pF- 0.1uF	330 pF - 1uF	1,000 pF -10uF
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 [3]	±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,25°C)	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	3x rated VDC	3x rated VDC	3x 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%

CAPACITANCE RANGE

RCD TYPE	WVDC[1]	STANDARD CAPACITANCE RANGE [1]		
		C0G (NPO) Std. tol. = 5%	X7R Std. tol. = 10%	Y5V(Z5U) [2] Std. tol. = 20%
CER15, CER17	25	0.47 - 3300pF	100pF- 0.22uF	.01uF - 1.2uF
	50	0.47 - 2200pF	100pF- 0.1uF	.01uF - 1uF
	100	0.47 - 1000pF	100pF- 0.047uF	1000pF - 0.1uF
CER20, CER22	25	0.47 - 6800pF	100pF- 1uF	.01uF - 1.2uF
	50	0.47 - 4700pF	100pF- 0.47uF	.01uF - 1uF
	100	0.47 - 3900pF	100pF- 0.1uF	.01uF - 0.33uF
CER30	25	10 - 10,000pF	470pF- 1uF	.1uF - 1.5uF
	50	10 - 6800pF	470pF - 1uF	.1uF - 1.5uF
	100	5 - 4700pF	100pF - 0.22uF	.1uF - 1.0uF
CER40	25	10 - 47,000pF	1000pF - 1uF	.68uF - 4.7uF
	50	10 -27,000pF	1000pF - 1uF	.68uF - 3.3uF
	100	5 -22,000pF	100pF - 0.47uF	.68uF - 2.2uF
CER50	25	1000pF - 0.1uF	.01uF - 2.2uF	1uF - 10uF
	50	1000pF- 0.047uF	.01uF - 2.2uF	1uF - 6.8uF
	100	1000pF- 0.033uF	.01uF - 1uF	1uF - 2.2uF

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

P/N DESIGNATION:

CER15 ☐ - 102 - K 050 R B W

RCD Type

Option Code (leave blank if standard)

Capacitance Code (pF) 2 signif. digits &multiplier:
R47=0.47pF, 1R0=1pF, 100=10pF, 101=100pF,102=1000pF, 103=.01uF(10,000pF), 104= .1uF(100,000pF), 105=1uF, 106=10uF

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(poly bag), A=Ammo, T=Tape & Reel (typical quantities are 500-1000 pcs/bag, 2500 per Ammo box, and 4000/Reel)

Termination: W=lead-free, Q=tin/lead (leave blank if either is acceptable, in which case RCD will select based on lowest price and quickest delivery)

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FA058B Sale of this product is in accordance with GF-061. Specifications subject to change without notice.