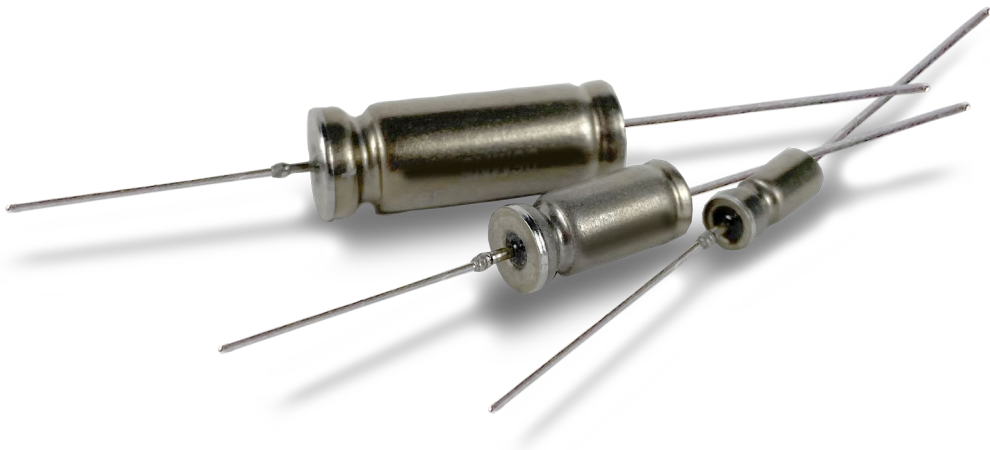


Quantic™ Evans



CC Series Hybrid Capacitors Product Datasheet

08.03.2022

Product Overview

CC series capacitors shall be comprised of sintered tantalum anodes and ruthenium oxide coated cathodes operating in aqueous electrolyte. The components shall be confined within a tantalum case, first by a compressed gasket, followed by a hermetically welded glass to metal seal.

CC capacitors are designed to operate reliably in extreme shock and vibration environments.

Electrical Specifications

Rated Voltage Range	10VDC to 125VDC
Capacitance Range	68uF to 2700uF
Capacitance Tolerance	±20%
Life (@85°C)	>2000 hours @ Rated Voltage

Mechanical Specifications

Test	Method	Condition	Remarks
Shock	MIL-STD-202 METHOD 213	D	Tested for 1ms at 500g peak
Vibration	MIL-STD-202 METHOD 204	H	12 sweeps/axis, 80g peak
	MIL-STD-202 METHOD 214	II, Letter K	1.5 hours/axis, 53.8g rms
Moisture Resistance	MIL-STD-202 METHOD 106		6V Polarity

Solderability	To ANSI J-STD-002
Operating Temperature Range	-55°C to +85°C or 125°C with voltage derating (see page 3)
Storage Temperature Range	-62°C to +130°C

Environmental Compliance

CC Series are RoHS 9/10 compliant to EU RoHS Directive 2015/863

- The standard terminals are 60/40 SnPb plated Nickel Wire
- RoHS 6/6 compliant Lead free leads available. See part numbering nomenclature for ordering info.

Capacitor Life

CC Series capacitors are rated for >2,000 hours at 85°C and rated voltage or 125°C at de-rated voltage. The effective life of a capacitor in a given application is based on the specific operating voltage and average temperature. The rule of thumb says that every 10°C decrease in operating temperature yields approximately 2x the life. Additionally, each 10% de-rate in voltage will yield approximately 2x the life.

CC Series Capacitors have an unlimited Shelf life.

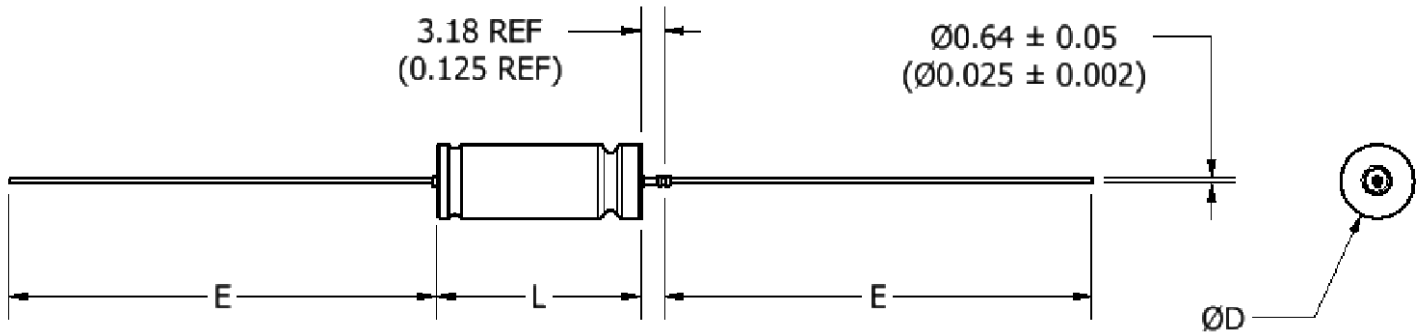
Part Number Description

Product Series	Case Size	Voltage Rating	Cap Rating	Option: ±10% Rating <small>(Standard tolerance ±20%)</small>	Option: Sleeving	Optional: Lead Free
CC#	X	XXX	XXX	K	S	LF

Ratings Table

Part Number	Voltage_105°C	Voltage_125°C	Cap (µF)	ESR (mΩ)	Height (in)	Mass (g)
CCB008102	8	7	1000	800	0.641	5.5
CC2B020102	20	15	1000	800	0.641	5.5
CCB020561	20	15	560	800	0.641	5.5
CC2B040471	40	30	470	900	0.641	5.5
CC2D040152	40	30	1500	450	1.062	15
CC3B040681	40	30	680	900	0.641	5.7
CC3D040222	40	30	2200	600	1.062	15
CC4B040821	40	30	820	800	0.641	5.7
CC4D040272	40	30	2700	800	1.062	15
CCB040221	40	30	220	900	0.641	5.5
CCD040681	40	30	680	700	1.062	15
CC2B048331	48	40	330	900	0.641	5.5
CC2D048122	48	40	1200	500	1.062	15
CC3B048471	48	40	470	1000	0.641	5.7
CC3B048561	48	40	560	1000	0.641	5.7
CC3D048182	48	40	1800	500	1.062	15
CC4B048681	48	40	680	900	0.641	5.7
CC4D048222	48	40	2200	800	1.062	15
CCB048151	48	40	150	1100	0.641	5.5
CCD048561	48	40	560	800	1.062	15
CC2A060680	60	50	68	2800	0.453	2.25
CC2B060221	60	50	220	1000	0.641	5.5
CC2D060102	60	50	1000	350	1.062	15
CC2D060941	60	50	940	500	1.062	15
CC3B060331	60	50	330	600	0.641	5.7
CC3D060122	60	50	1200	400	1.062	15
CC4B060391	60	50	390	600	0.641	5.7
CC4D060152	60	50	1500	600	1.062	15
CCB060111	60	50	110	1300	0.641	6
CCD060471	60	50	470	900	1.062	15
CC2A080330	80	65	33	3000	0.453	2.25
CC2B080151	80	65	150	1200	0.641	5.5
CC2D080471	80	65	470	500	1.062	15
CC3A080470	80	65	47	2500	0.453	2.25
CC3B080221	80	65	220	800	0.641	5.7
CC3D080681	80	65	680	600	1.062	15
CC4B080271	80	65	270	1000	0.641	5.7
CC4D080881	80	65	880	600	1.062	15
CCB080680	80	65	68	2100	0.641	6
CCD080221	80	65	220	1200	1.062	18
CC2A100220	100	85	22	3200	0.453	2.25
CC2B100101	100	85	100	1800	0.641	5.5
CC2D100241	100	85	240	800	1.062	18
CC2D100331	100	85	330	800	1.062	15
CC3B100151	100	85	150	1000	0.641	5.7
CC3D100471	100	85	470	700	1.062	15
CC4B100181	100	85	180	1500	0.641	5.7
CC4D100561	100	85	560	700	1.062	15
CCB100470	100	85	47	2300	0.641	6
CCD100151	100	85	150	1600	1.062	18
CC2D120151	120	100	150	1800	1.062	18

2D Drawing



Case Size	Dimensions, mm (in)			
	Basic Case		Insulated Case	E ± 6.35 (0.250)
	L +0.79 (0.031) -0.41 (0.016)	D ± 0.41 (0.016)	D MAX	
A	11.51 (0.453)	4.78 (0.188)	5.56 (0.219)	38.10 (1.500)
B	16.28 (0.641)	7.14 (0.281)	7.92 (0.312)	57.15 (2.250)
D	26.97 (1.062)	9.52 (0.375)	10.31 (0.406)	57.15 (2.250)
A-LF	11.51 (0.453)	4.78 (0.188)	5.56 (0.219)	25.40 (1.000)
B-LF	16.28 (0.641)	7.14 (0.281)	7.92 (0.312)	25.40 (1.000)
D-LF	26.97 (1.062)	9.52 (0.375)	10.31 (0.406)	25.40 (1.000)