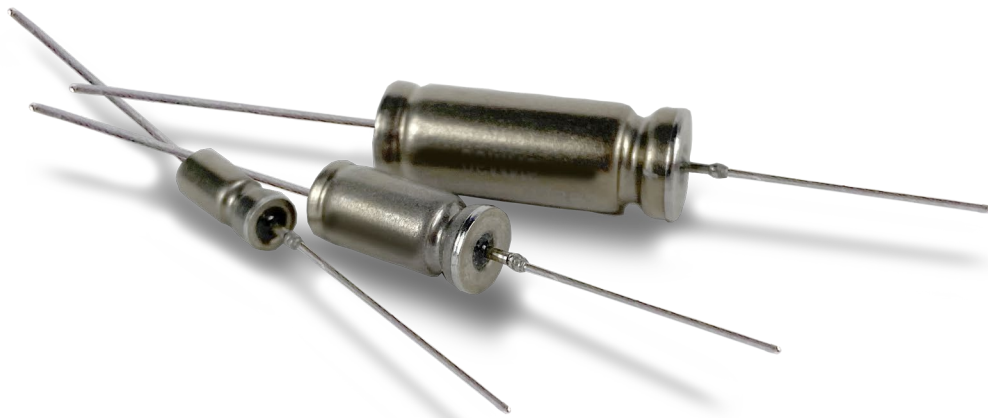


Quantic™ Evans



HyCap High Temp Series Hybrid Capacitors Product Datasheet

08.03.2022

Product Overview

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

HyCap High Temp series capacitors are designed for operation in environments of up to 200°C. For extreme shock environments, HyCap-HTX series capacitors offer a robust construction in the largest traditional D(T4) case style. Information available upon request.

Electrical Specifications

Rated Voltage Range (@200°C)	25VDC to 75VDC
Capacitance Range	22uF to 1800uF
Capacitance Tolerance	±20%

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 200°C with voltage derating (see page 3)
Storage Temperature Range	-62°C to +130°C

Environmental Compliance

HyCap HT series capacitors are RoHS 9/10 compliant to EU RoHS Directive 2015/863

- The standard terminals are 60/40 SnPb plated Nickel Wire
- RoHS 10/10 compliant Lead free leads available. See part numbering nomenclature on page 3 for ordering info.

Capacitor Life

Capacitors shall be able to withstand either 175°C or 200°C life test (with appropriate voltage derating per the table on page 3) for durations of 500-2000 hours based on the voltage rating. Contact Quantic Evans to learn more.

Export Classification

HyCap High Temp series capacitors are **ECCN EAR99**

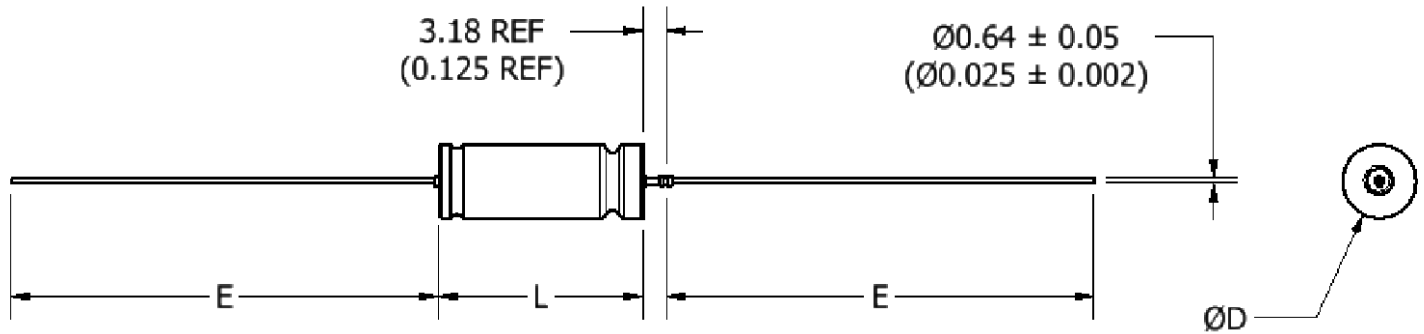
Part Number Description

Product Series	Case Size	Voltage Rating	Cap Rating	HT Series Identifier	Option: ±10% Rating (Standard tolerance ±20%)	Option: Sleeving	Optional: Lead Free
HC-HT	X	XXX	XXX	HT	K	S	LF

Ratings Table

Part Number	Voltage 175°C	Voltage 200°C	Cap (µF)	ESR (mΩ)	Height (in)	Mass (g)
HC2A050101HT	30	25	100	2600	0.453	2.25
HC2B050471HT	30	25	470	900	0.641	5.25
HC2D050152HT	30	25	1,500	500	1.062	15
HCD050681HT	35	30	680	700	1.062	18
HC2B060331HT	36	30	330	900	0.641	5.25
HC3B060561HT	36	30	560	1300	0.641	5.75
HCD060561HT	42	36	560	800	1.062	18
HC2D060122HT	36	30	1,200	500	1.062	15
HC3D060182HT	36	30	1,800	600	1.062	15.5
HC2A075680HT	45	37	68	2800	0.453	2.25
HC2B075221HT	45	37	220	1000	0.641	5.25
HC2D075941HT	45	37	940	600	1.062	15
HC3D075122HT	45	37	1,200	800	0.641	5.75
HC4D075152HT	60	50	1,500	600	1.062	15.5
HCB075111HT	50	45	110	1300	0.641	6
HCD075471HT	50	45	470	900	1.062	18
HC3B075331HT	45	37	330	1500	0.641	5.75
HC4B075391HT	45	37	390	800	0.641	5.75
HC2A100330HT	60	50	33	3000	0.453	2.25
HC2B100151HT	60	50	150	1200	0.641	5.25
HC2D100471HT	60	50	470	700	1.062	15
HC3D100681HT	60	50	680	500	1.062	15.5
HC4D100881HT	60	50	880	600	1.062	15.5
HC3B100221HT	60	50	220	1000	0.641	5.75
HC4B100271HT	60	50	270	1200	0.641	5.75
HCB100680HT	70	60	68	2100	0.641	6
HCD100221HT	70	60	220	1200	1.062	18
HC2A125220HT	75	62	22	3200	0.453	2.25
HC2B125101HT	75	62	100	1800	1.062	5.25
HC3B125151HT	75	62	150	1200	1.062	5.75
HC4B125181HT	75	62	180	1400	1.062	5.75
HCD125151HT	85	75	150	1600	1.062	18
HC2D125331HT	75	62	330	800	1.062	15
HC3D125471HT	75	62	470	600	1.062	15.5
HC4D125561HT	75	62	560	700	1.062	15.5

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)