

## Hybrid Wet Tantalum

# HyCap

Series

DLA 10004, 93026



- Style: axial-leaded
- Voltages range from 10V-150V
- Cap values range from 47 $\mu$ F – 2,700 $\mu$ F
- Temperature range of -55°C to 125°C
- Designed for high shock and vibration environments
- Standard tolerance  $\pm$ 20% ( $\pm$ 10% available)

## Product Overview

HyCap 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 series capacitors are designed to operate reliably in high shock and vibration environments.

In addition to our HyCap series capacitors we offer HyCap-HT (high temperature) series capacitors 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	Physical
<p><b>Rated Voltage Range</b> 10VDC to 150VDC</p> <p><b>Capacitance Range</b> 47<math>\mu</math>F to 2700<math>\mu</math>F</p> <p><b>Capacitance Tolerance</b> <math>\pm</math>20% (+/- 10% available)</p> <p><b>Life (@ 85°C)</b> &gt;2000 hours @ Rated Voltage</p>	<p><b>Solderability</b> To ANSI J-STD-002</p> <p><b>Operating Temperature Range</b> -55°C to +85°C or 125°C with voltage derating (see page 3)</p> <p><b>Storage Temperature Range</b> - 62°C to +130°C</p>

Mechanical			
Test	Method	Condition	Remarks
Shock	MIL-STD-202 METHOD 213	D	1 ms, 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 bias

## Environmental Compliance

HyCap series capacitors are not RoHS compliant. HyCap series capacitors are REACH compliant.

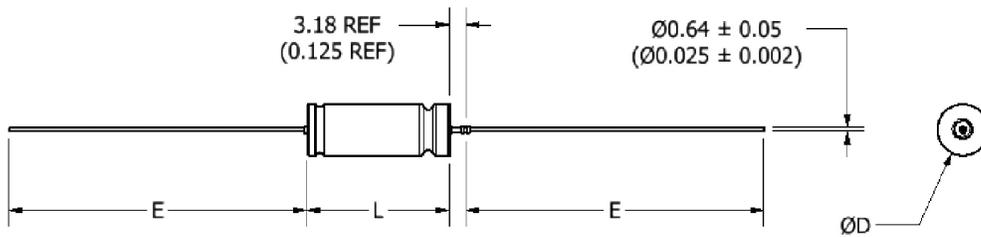
- The standard terminals are 60/40 SnPb plated Nickel Wire
- Lead free RoHS compliant versions are available. See part numbering nomenclature for ordering info.

## Capacitor Life

HyCapSeries capacitors are rated for >2,000 hours at 85°C and rated voltage or 125°C at derated 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% derate in voltage will yield approximately 2x the life.

HyCap series capacitors have an unlimited Shelf life.

## 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	
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)
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)

## Part Number Description

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

## Ratings Table

Part Number	DLA PN	Voltage_85°C	Voltage_125°C	Cap (µF)	ESR (mΩ)	Height (in)	Mass (g)
HCB010102		10	7	1,000	800	0.641	5.5
HCB025561		25	15	560	800	0.641	5.5
HC2B025102	10004-19	25	15	1,000	800	0.641	5.5
HCB050221		50	30	220	900	0.641	5.5
HC2B050471	10004-20	50	30	470	900	0.641	5.5
HC3B050681	10004-25	50	30	680	900	0.641	5.7
HCD050681	93026-40	50	30	680	700	1.062	15
HC2D050152	10004-08	50	30	1,500	450	1.062	15
HC3D050222	10004-15	50	30	2,200	600	1.062	15
HC4D050272		50	30	2,700	800	1.062	15
HC4B050821		50	30	820	800	0.641	5.5
HCB060151	93026-42	60	40	150	1100	0.641	5.5
HC2B060331	10004-21	60	40	330	900	0.641	5.5
HC3B060471	10004-26	60	40	470	1000	0.641	5.7
HC3B060561	10004-27	60	40	560	1000	0.641	5.7
HCD060561	93026-44	60	40	560	800	1.062	15
HC2D060122	10004-16	60	40	1,200	500	1.062	15
HC3D060182	10004-28	60	40	1,800	500	1.062	15
HC4D060222		60	40	2,200	450	1.062	15
HC4B060681		60	40	680	900	0.641	5.7
HCB075111	93026-46	75	50	110	1300	0.641	6
HCD075471	93026-48	75	50	470	900	1.062	15
HC2B075221	10004-22	75	50	220	1000	0.641	5.5
HC3B075331	10004-29	75	50	330	600	0.641	5.7
HC4B075391		75	50	390	600	0.641	5.7
HC2D075941	10004-17	75	50	940	500	1.062	15
HC2D075102		75	50	1,000	350	1.062	15
HC3D075122	10004-30	75	50	1,200	400	1.062	15
HC4D075152		75	50	1,500	600	1.062	15
HCB100680	93026-50	100	65	68	2100	0.641	6
HC2B100151	10004-23	100	65	150	1200	0.641	5.5
HC3B100221		100	65	220	800	0.641	5.7
HC4B100271		100	65	270	1000	0.641	5.7
HCD100221	93026-52	100	65	220	1200	1.062	18
HC2D100471	10004-18	100	65	470	500	1.062	15
HC3D100681		100	65	680	600	1.062	15
HC4D100881		100	65	880	600	1.062	15
HCB125470		125	85	47	2300	0.641	6
HC2B125101		125	85	100	1800	0.641	6
HC3B125151		125	85	150	1000	0.641	5.7
HC4B125181		125	85	180	1500	0.641	5.7
HCD125151	93026-56	125	85	150	1600	1.062	18
HC2D125241	10004-14	125	85	240	800	1.062	18
HC2D125331	10004-24	125	85	330	800	1.062	15
HC3D125471		125	85	470	700	1.062	15
HC4D125561		125	85	560	700	1.062	15
HC2D150151		125	85	150	1800	1.062	15