# WET TANTALUM CAPACITORS

HE5

# Wet Tantalum Capacitors, High Energy, Ultra High Capacitance, -55 °C to +125 °C Operation



# **KEY BENEFITS**

- High energy, very high capacitance design
- · All tantalum, hermetically sealed case
- Utilizes Vishay's proven SuperTan<sup>®</sup> technology
- Terminations: radial leaded

# **APPLICATIONS**

- Avionics
- Military
- Space

# **RESOURCES**

- Datasheet: HE5 www.vishay.com/doc?42104
- For technical questions contact <u>tantalum@vishay.com</u>
- Material categorization: for definitions of compliance please see <a href="https://www.vishay.com/doc?99912">www.vishay.com/doc?99912</a>



RoHS AVAILABLE





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## **PERFORMANCE CHARACTERISTICS**

#### **Operating Temperature:**

-55 °C to +85 °C (to +125 °C with voltage derating)

### **Capacitance Tolerance:**

at 120 Hz, +25 °C  $\pm$  20 % standard

± 10 % available as special

Contact marketing for availability of 10 % tolerance

### DC Leakage Current (DCL Max.):

at +25 °C: leakage current shall not exceed the values listed in the Standard Ratings tables.

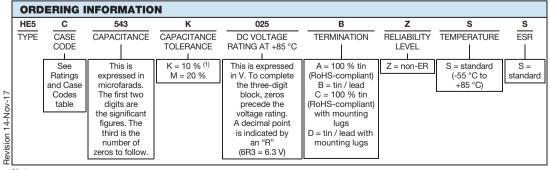
### Life Test:

capacitors are capable of withstanding a 2000 h life test at a temperature of  $+85~^{\circ}\text{C}$  at the applicable rated DC working voltage.

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. ESR AT +25 °C, 1 kHz $(\Omega)$	MAX. DCL AT +25 °C (μΑ)
		25 V <sub>DC</sub> AT +85 °C; 15 V <sub>DC</sub> AT +	+125 °C	
18 000	Α	HE5A183(1)025(2)(3)(4)(5)	0.050	150
24 000	Α	HE5A243(1)025(2)(3)(4)(5)	0.060	150
36 000	В	HE5B363(1)025(2)(3)(4)(5)	0.045	200
48 000	В	HE5B483(1)025(2)(3)(4)(5)	0.045	200
54 000	С	HE5C543(1)025(2)(3)(4)(5)	0.035	300
72 000	С	HE5C723(1)025(2)(3)(4)(5)	0.035	350
		50 V <sub>DC</sub> AT +85 °C; 30 V <sub>DC</sub> AT +	+125 °C	
8000	Α	HE5A802(1)050(2)(3)(4)(5)	0.075	170
16 000	В	HE5B163(1)050(2)(3)(4)(5)	0.045	270
24 000	С	HE5C243(1)050(2)(3)(4)(5)	0.035	400
		63 V <sub>DC</sub> AT +85 °C; 40 V <sub>DC</sub> AT +	+125 °C	
4000	Α	HE5A402(1)063(2)(3)(4)(5)	0.100	170
8000	В	HE5B802(1)063(2)(3)(4)(5)	0.055	270
12 000	С	HE5C123(1)063(2)(3)(4)(5)	0.035	400
		80 V <sub>DC</sub> AT +85 °C; 50 V <sub>DC</sub> AT +	+125 °C	
3000	Α	HE5A302(1)080(2)(3)(4)(5)	0.100	200
6000	В	HE5B602(1)080(2)(3)(4)(5)	0.065	350
9000	С	HE5C902(1)080(2)(3)(4)(5)	0.040	500
		100 V <sub>DC</sub> AT +85 °C; 65 V <sub>DC</sub> AT	+125 °C	
1900	Α	HE5A192(1)100(2)(3)(4)(5)	0.085	200
3800	В	HE5B382(1)100(2)(3)(4)(5)	0.065	350
5700	С	HE5C572(1)100(2)(3)(4)(5)	0.050	500
		125 V <sub>DC</sub> AT +85 °C; 85 V <sub>DC</sub> AT	+125 °C	
1100	Α	HE5A112(1)125(2)(3)(4)(5)	0.100	200
2200	В	HE5B222(1)125(2)(3)(4)(5)	0.085	350
3300	С	HE5C332(1)125(2)(3)(4)(5)	0.075	500

#### Note

- Part number definitions:
- (1) Standard capacitance tolerance is 20 % or "M". Contact marketing for availability of 10 % or "K"
- (2) Standard termination is "B" (tin / lead) or "D" (tin / lead with mounting lugs). RoHS-compliant is "A" (100 % tin) or "C" (100 % tin with mounting lugs)
- (3) Standard reliability is "Z" or non-established reliability
- (4) Standard temperature range is "S" or -55 °C to +125 °C
- (5) Standard ESR is "S"



#### Note

(1) Contact marketing for availability of 10 % tolerance