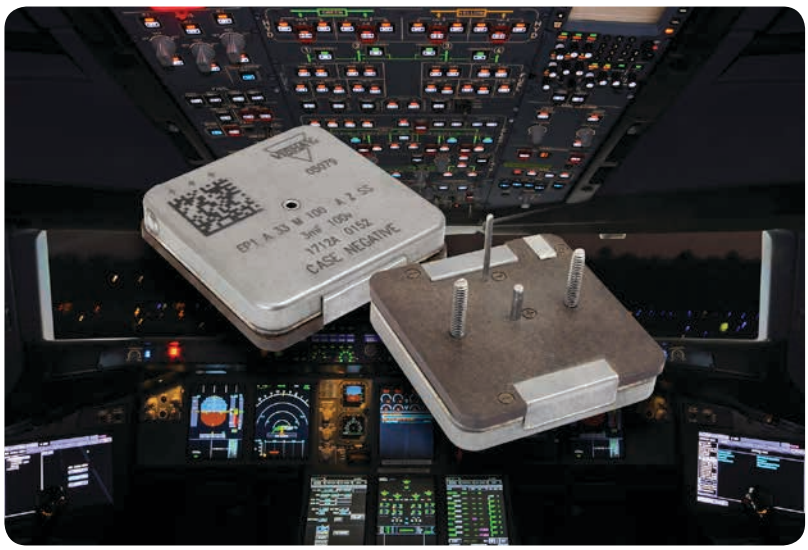
WET TANTALUM CAPACITORS

EP1

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® technology
- Patent pending
- Two termination options: SMD and radial

APPLICATIONS

Avionics:

- Pulse power
- Energy hold-up

RESOURCES

- Datasheet: EP1 - www.vishay.com/doc?42107
- For technical questions contact tantalum@vishay.com
- Material categorization: for definitions of compliance, please see - www.vishay.com/99912

Pb-free Available

RoHS* COMPLIANT

A WORLD OF SOLUTIONS™

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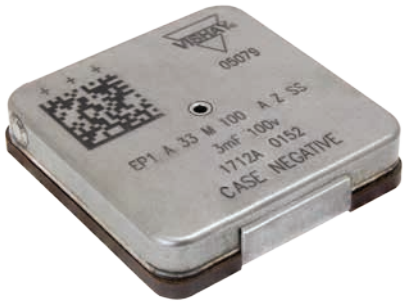

PERFORMANCE CHARACTERISTICS

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

Capacitance Tolerance:
at 120 Hz, +25 °C ± 20 % standard
± 10 % available as special

Contact marketing for availability of 10 % tolerance

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. ESR AT +25 °C, 1 kHz (Ω)	MAX. DCL AT +25 °C (µA)	MAX. DCL AT +85 °C (mA)	WEIGHT (g)
25 V_{DC} AT +85 °C; 15 V_{DC} AT +125 °C, SURGE VOLTAGE = 27.5 V_{DC}						
30 000	A	EP1A303(1)025(2)(3)(4)(5)	0.030	150	1.5	63
35 V_{DC} AT +85 °C; 21 V_{DC} AT +125 °C, SURGE VOLTAGE = 38.5 V_{DC}						
20 000	A	EP1A203(1)035(2)(3)(4)(5)	0.040	150	1.5	63
50 V_{DC} AT +85 °C; 30 V_{DC} AT +125 °C, SURGE VOLTAGE = 55 V_{DC}						
13 000	A	EP1A133(1)050(2)(3)(4)(5)	0.050	100	1.0	63
63 V_{DC} AT +85 °C; 40 V_{DC} AT +125 °C, SURGE VOLTAGE = 69 V_{DC}						
6000	A	EP1A602(1)063(2)(3)(4)(5)	0.050	100	1.0	63
80 V_{DC} AT +85 °C; 50 V_{DC} AT +125 °C, SURGE VOLTAGE = 88 V_{DC}						
4000	A	EP1A402(1)080(2)(3)(4)(5)	0.055	100	1.0	63
100 V_{DC} AT +85 °C; 65 V_{DC} AT +125 °C, SURGE VOLTAGE = 110 V_{DC}						
3000	A	EP1A302(1)100(2)(3)(4)(5)	0.065	100	1.0	63
125 V_{DC} AT +85 °C; 85 V_{DC} AT +125 °C, SURGE VOLTAGE = 27.5 V_{DC}						
2000	A	EP1A202(1)125(2)(3)(4)(5)	0.100	100	1.0	63

Note

- Part number definitions:
  (1) Standard capacitance tolerance is 20 % or “M.” Contact marketing for availability of 10 % or “K.”
  (2) Standard termination is “F” radial tin / lead. RoHS-compliant or radial 100 % tin is available as “E.”
  (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.”

PERFORMANCE CHARACTERISTICS OF HIGH ENERGY CAPACITORS

ORDERING INFORMATION

EP1	C	543	K	025	B	Z	S	S	
TYPE	CASE CODE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT +85 °C	TERMINATION CODE	RELIABILITY LEVEL	TEMPERATURE	ESR	MOUNTING STUD LENGTH
	See Dimensions sheets	This is expressed in microfarads. The first two digits are the significant figures. The third is the number of zeros to follow.	K = 10 % (1) M = 20 %	This is expressed in V. To complete the three-digit block, zeros precede the voltage rating. A decimal point is indicated by an “R” (6R3 = 6.3 V)	See termination / mounting options in the Dimensions sheets.	Z = non-ER	S = standard (-55 °C to +85 °C)	S = standard	Blank = not applicable A = 0.23" B = 0.30" C = 0.40" D = 0.50" E = customer to specify

Revision 20-Feb-17

Note

(1) Contact marketing for availability of 10 % tolerance