

New EP2 Wet Tantalum Capacitor Offers Industry-High Capacitance, Mechanical Robustness for Military and Avionics Systems; Can Be Used as an Exact Drop-in Replacement for Competing Solutions or a Higher Capacitance Alternative

Product Benefits:

- Ultra high capacitance
 - 2,700 μF to 48,000 μF in the B case code
 - 3,600 μF to 72,000 μF in the C case code
- Voltage ratings from 25 VDC to 125 VDC
- Offered in the B and C case codes
- Available with capacitance tolerance down to $\pm 10\%$
- Housed in an all-tantalum, hermetically sealed case for increased reliability
- Offering robust mechanical performance, the capacitor features high vibration (high frequency: 20 g; random: 19.64 g) and mechanical shock (50 g) capabilities
- Maximum ESR down to 0.017 Ω
- Available with tin / lead (Sn / Pb) and RoHS-compliant 100 % tin terminations
- Available with radial through-hole terminations with a stud mount option



Market Applications:

- Pulse power and energy hold-up applications in laser guidance, radar, and avionics systems

The News:

To meet the needs of military and avionics applications, Vishay Intertechnology introduces a new high energy wet tantalum capacitor that delivers the industry's highest capacitance per voltage rating and case size for this device type.

- Built on Vishay's proven SuperTan® technology
- The EP2 can be used as an exact drop-in replacement for competing parts or as a higher capacitance alternative in a mechanically equivalent package to reduce component counts, save space, and lower design costs
- The device's industry-leading values include a capacitance of 9,000 μF at 80 V and 58,000 μF at 35 V in the C case size. These values are 50 % and 21 % greater, respectively, than the closest competing device



The Key Specifications:

- Capacitance:
 - 2,700 μF to 48,000 μF (B case)
 - 3,600 μF to 72,000 μF (C case)
- Voltage ratings: 25 VDC to 125 VDC
- Case codes: B and C
- Capacitance tolerance: $\pm 20\%$ standard; $\pm 10\%$ available
- Operating temperature range: $-55\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$, to $+125\text{ }^{\circ}\text{C}$ with voltage derating
- Max. ESR at 1 kHz and $+25\text{ }^{\circ}\text{C}$: 0.017 Ω 0.05 Ω

Availability:

Samples and production quantities of the EP2 are available now, with lead times of 16 weeks for larger orders.

To access the product datasheet on the Vishay Website, go to <http://www.vishay.com/ppg?42113> (EP2)

Contact Information:

THE AMERICAS

Dave Bellomy
david.bellomy@vishay.com

EUROPE

Thomas Waechter
thomas.waechter@vishay.com

ASIA/PACIFIC

Boon Hooi Tan
boonhooi.tan@vishay.com