



# ***DID YOU KNOW?***

## **SIX REASONS TO RELY ON WET TANTALUM HIGH ENERGY CAPACITORS IN RUGGED APPLICATIONS**

High energy wet tantalum capacitors are the capacitors of choice for energy hold-up and pulse power in space, military, and other high reliability applications. Vishay is the global leader in wet tantalum technology and offers the broadest portfolio, as well as the industry's leading performance families.

Here are six reasons high energy wet tantalum capacitors are the ideal solution for high reliability and harsh environment applications.

### **1. Maximum CV (capacitance - voltage)**

For example, the [EP1A](#) case can provide 2 mF at 125 V, or as high as 22 mF at 35 V, while the [EP1C](#) expands this even higher to 5.3 mF at 125 V, or 58 mF at 35 V. These cases provide the lowest space, lowest weight, and lowest cost solution for any Hi-Rel hold-up or pulse power application.

### **2. No Derating up to +85 °C**

This enables designers to achieve more capacitance per specified and rated voltage when used below +85 °C. Solid tantalum equivalents require up to 50 % derating.

### **3. Hermetically Sealed Against Long Term Moisture and Humidity, With no Special Handling or Storage Required for MSL**

High energy wet tantalum capacitors are packaged in a laser-welded, hermetically sealed tantalum case.

### **4. Multiple Mounting and Termination Options**

The Vishay [EP1 series](#) of high energy wet tantalum capacitors offers multiple termination and mounting options. These include radial through-hole and surface-mount terminations, 100 % tin or tin / lead coatings, and optional stud mounting for mechanical strength.

### **5. Vishay High Energy Capacitors are Qualified to Meet the Requirements of High Altitude Applications**

Designs have been tested to MIL-STD-202, method 105C, test condition D, for 100 000 feet.

### **6. No Aging or Reforming Required After Prolonged Storage**

The capacitors have an unlimited shelf life when stored in a controlled environment. Some devices have been successfully used in avionics and space applications for over 50 years.

For more information please contact [tantalum@vishay.com](mailto:tantalum@vishay.com).