## **TYPE 137D**

# Hermetically-Sealed, Gelled-Electrolyte Sintered Anode TANTALEX® Capacitors for Operation to +175°C



**D** ESIGNED for operation in aerospace equipment, hermetically-sealed Type 137D capacitors provide excellent volume efficiency and operating characteristics in the temperature range to +175°C. In addition, an extended capacitance value range is provided.

The performance of Type 137D capacitors meets or exceeds the environmental and life test requirements of Military Specification MIL-C-3965F. Type 137D uses the same gelled-electrolyte employed in Sprague's proven standard Type 109D sintered anode Tantalex capacitors which gives optimum characteristics for all frequency and temperature parameters.

### **Performance Characteristics**

#### Operating Temperature.

 $-55^{\circ}$ C to  $+175^{\circ}$ C with voltage derating above  $+85^{\circ}$ C.

#### Capacitance Tolerance.

At 120Hz, +25°C. ±20%; ±10%; +20%, -15%, and +75%, -15%.

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

At +25°C, +85°C and +125°C the leakage current shall not exceed the values listed in the Standard Ratings tables.



#### Life Test.

Capacitors are capable of withstanding a 2000 hour life test at a temperature of +85°C or +125°C at the applicable rated d-c working voltage. Following life test:

- 1. Capacitors shall be returned to  $+25^{\circ}C \pm 5^{\circ}C$ .
- 2. DCL shall not exceed original requirement.
- 3. The ESR shall not exceed the initial requirement.
- 4. Change in capacitance shall not exceed  $\pm 10\%$ .

For complete details, see Sprague Data Sheet 3703.