# **P** Pacsci Emc

**PART NUMBER 2-502640-1** 

## **SEPARATION NUT**

#### **DESCRIPTION**

This 3/4" separation nut was originally designed for use on the Vertical Launch ASROC program. It uses a 2-102090-1 pressure cartridge for actua-tion. The Separation Nut utilizes a MIL-I-23659 qualified initiator to cause nut separation when fired. When functioned, the end of the housing containing the threaded nut portion is forcefully driven from the remaining housing to ensure clean separation.



### **PERFORMANCE**

| All-Fire Current: | 5.0 amps                   |
|-------------------|----------------------------|
| No-Fire Current:  | 1 amp/1 watt for 5 minutes |
| Separation Time:  | ≤ 10 milliseconds          |

#### **ELECTRICAL PROPERTIES**

| Bridgewire Resistance:       | $1.05 \pm .1\Omega$ Shunt Resistance: |
|------------------------------|---------------------------------------|
|                              | 1.0±0.3 Ω                             |
| Shunt Resistance: 1.40 ± .2Ω | Dielectric Strength:                  |
|                              | ≤.1 mA @ 500 VAC                      |
| Insulation Resistance:       | ≥50 Megohms @ 500 VDC                 |
| Dielectric Strength:         | ≤.1 mA @ 500 VAC                      |

#### **SELECT ENVIRONMENTS**

| Shear Strength: 5,000 lbs.              |
|---|
| High Temperature: +200F per MIL-STD-810 |
| Method 501, Procedure 1                 |
| Low Temperature: -65F per MIL-STD-810   |
| Method 502, Procedure 1                 |

#### PRESSURE CARTRIDGE

| Thread:                    | .5625-18 UNF -3A              |  |
|----------------------------|-------------------------------|--|
| Body:                      | 304 CRES                      |  |
| Leakage:                   | 2.7 x 10 <sup>-5</sup> cc/sec |  |
| Dual Bridgewire with shunt |                               |  |



