PRODUCT FAMILY

HOT GAS INITIATOR

A Hot Gas Initiator provides a method of converting one signal transmission method into another. Typical conversion types as part of an Emergency Escape System include:

- Hot gas (i.e. from an Ejection Seat System) to a detonating signal (i.e.: to an attached Shielded Mild Detonating Cord (SMDC), Flexible Confined Detonating Cord (FCDC), Confined Detonating Cord (DCD) or Rapid Deflagrating Cord Transfer Line(RDCTL)
- Detonating signal to hot gas
- Hot gas to a deflagrating signal (i.e. HGI to attached RDCTL)



APPLICABLE SPECIFICATIONS

Operating Temperature: -65°F to +200°F

Leak Rate: $1 \times 10-5$ cc / sec. Air at 1.0 + 1 Atmosphere

Vibration: 5-2,000 Hz sinusoidal vibrations at 10 g's maximum amplitude per MIL-STD-810,

Method 514.1, Procedure I

Shock: 10 shocks of 15 g's maximum acceleration in 8 milliseconds maximum, exceeding 8

g's for 11 milliseconds maximum, per MIL-D-23615

High Temperature: $+200^{\circ}F +/-5^{\circ}F$ for 1 hour per MIL-D-21625 Low Temperature: $-65^{\circ}F +/-5^{\circ}F$ for 1 hour per MIL-D-21625

Sand/Dust: .3 +/- .2 gm./ft. 3 dust concentration, with a maximum air velocity of 1,750 +/-

 $250~\mathrm{fpm}$ and $+145^{\circ}\mathrm{F}$ maximum per MIL-STD-810, Method 510

Salt Fog: 48 hours at $+95^{\circ}F + /-2.5^{\circ}F$ per MIL-STD-810, Method 509

lcing: $-65^{\circ}F$ to $+100^{\circ}F$ +/- $5^{\circ}F$ at 90% RH, then returned to $-65^{\circ}F$ and functioned, per

MIL-D-23615

Platform Use & Heritage: F-15, F/A-18, B-1B, Scorpion, Improved CFS w/Inerts

Drop 6 feet onto a steel plate at least 2 inches thick, over concrete per MIL-D-21625; 40 feet onto a steel plate over reinforced concrete per MIL-D-21625

Temperature/Humidity Cycling in two and three week segments from -80oF to +160oF at 90% RH per MIL-D-21625



