DESTRUCT CHARGE

Used to terminate the flight of an errant launch vehicle, missile or target vehicle the Bulk Destruct Charge (BDC) consists of an explosive pellet inside a stainless steel housing. It is designed for mission critical applications where reliable motor case venting is required. Used as the final component of a flight termination system this device meets the stringent requirements of RCC-319. Upon detonation, the explosive pellet forms a high velocity flyer plate capable of penetrating the forward or aft dome of a rocket motor case or fuel tank to vent pressure and terminate flight. The stainless steel housing includes redundant initiation ports that receive Low Energy Exploding Foil Initiators (LEEFIs) or detonating cord transfer lines. The mounting configuration is customizable for vehicle specific requirements. This BDC is typically used in conjunction with Electronic Safe & Arm (ESAD) or Electro-Mechanical Safe & Arm Devices to complete a flight termination system.

APPLICABLE SPECIFICATIONS

Operating
Temperature Range: $-65 \, ^\circ F (-54 \, ^\circ C)$ to $+350 \, ^\circ F (+176.67 \, ^\circ C)$
Shock: $1400g$ @ $10,000Hz$ (and per vehicle environments)
Vibration: $33.5Grms$ (and per vehicle environments)
Detonation – sized for 150% vehicle motor case thickness

FEATURES

Hermetically sealed steel housing
PBXN-5 explosive load – sized to penetrate 150% vehicle motor case thickness
Integral initiation ports for redundant LEEFI or Transfer Lines

PERFORMANCE DATA

Severance of $> 0.5$ inch thick D6AC steel
$-65^\circ F$ to $+200^\circ F$