PRODUCT FAMILY

THRU BULKHEAD INITIATOR

A Thru Bulkhead Initiator (TBI) is an initiation device that utilizes a shock input stimulus where the TBI donor charge initiates and transfers a shock wave through an adjacent structural bulkhead with sufficient intensity to cause the initiation of a receptor charge on the opposite side of the bulkhead. The TBI provides a detonation or deflagration at the output end of the device without breaching the bulkhead which is designed to provide a pressure containment barrier post functioning.



APPLICABLE SPECIFICATIONS

Shock Input: FCDC (equiv. 1 grain HNS), detonator

Output Deflagration: Tailored peak output performance in 10cc closed bomb

Detonation: 0.017-inch dent depth in Aluminum witness plate

Ignition Time: ≤ 10 milliseconds

Operating Temperature: Designs with operating temperature down to -65 °F and up to 400 °F

Leakage (pre-function): Designs that comply with 1×10^6 cc He/sec at 1 atm

Pressure Containment (post function): Designs to withstand up to 25,000 psig

Applicable Specifications: MIL-STD-1901A

MIL-HDBK-83578

