PRODUCT FAMILY

HOT BRIDGE WIRE | ELECTRO-EXPLOSIVE DEVICES

Hot Bridge Wire devices (HBW) are used to provide high reliable critical functions across many industries. An HBW converts electrical energy into chemical energy providing a gas or heat output. An electrical input is applied to the HBW, heating a small wire, called a bridge wire, which is in contact with the pyrotechnic. The wire quickly heats to the auto-ignition temperature of the pyrotechnic or explosive material. The pyrotechnic material then reacts providing gas pressure and/or flame. The heat and flame can be used to ignite other explosives or propellants while the gas pressure can be used to perform work.

Frequently used names are: initiator, igniter, ignitor, detonator, squib, cartridge, or pressure cartridge.

APPLICABLE SPECIFICATIONS

All-Fire, Typical:	3.5 amps at 0.999 reliability at 95% Confidence level
No-Fire, Typical:	1.0 amps / 1.0 watt, 0.001 probability to fire at 95% lower confidence
Operating Temperature Ranges:	As low as -420°F for PacSci EMC's Space Initiator As high as +400°F for PacSci EMC's GreenDet™
Ordnance Output:	Deflagration – Tailored peak output pressure performance Detonation – Tailored dent depth in steel or Al dent block
Electrostatic Discharge, Typical:	25 kVDC from a 500 pF capacitor with a 5000 ohm series resistor

APPLICATIONS

- ignition
- initiation
- release
- severance
- fracture
- cutting
- jettison
- valving
- switching
- time delay
- actuation

ENVELOPE & DIMENSIONS