

PRODUCT FAMILY

FIRE EXTINGUISHER SQUIB

Fire Extinguisher Squibs are utilized to allow the flow of fire suppressant from a storage bottle. The engines, auxiliary power units and in some cases gear boxes on helicopters incorporate extensive measures for fire protection. The Fire Ex cartridge or squib is an integral part of commercial and military fire extinguisher systems. Cartridges/squibs come in a number of configurations and output depending upon the customer requirements. The configuration is driven by the manufacturers of the different fire suppression systems. In many cases, the same cartridge is utilized on several different aircraft because they use the same fire suppression storage bottle. This simplifies logistics and data tracking if done.



APPLICABLE SPECIFICATIONS

Operating Temperature Range:	-65 OF (-54 OC) to +200 OF (+93.330C)
Leak Rate:	1×10-5 cc/sec. Helium or 1×10-6 cc/sec. Helium
No-Fire Current Range:	0.5 amp/0.25 watt for 1 minute 1 amp 1 watt for 5 minutes (depending upon qualification standard utilized)
All-Fire Current:	3.0 Amps minimum or 3.5 Amp minimum
Ignition Time:	Normally < 20 milliseconds maximum (at 3.0 Amps Minimum)
Output:	Pressure or detonation (depending upon closure/diaphragm material & thickness)
Electrostatic Discharge:	25,000 + 500 volts discharged from a 500 + 25pico-farad capacitor between shorted pins-to-case through a 5,000 ohm resistor in series
Bridgewire Resistance:	1 + 0.1 Ohms through 1.15 + 0.25 ohms
Insulation Resistance:	> 2 Megohms @ 500 VDC
Vibration:	PSD= + 1.5 dB from 10-500Hz, + 3 dB from 500 to 2000 Hz Overall GRMS = + 10%, duration + 5% Vibration shall be applied along each of three (3) mutually orthogonal axes, at ambient -65°F and 300° F for 40 minutes per axis at each temperature

ENVELOPE & DIMENSIONS

