PPacsci emc

INITIATOR

PART NUMBER 103377-3

103377 INITIATORS

DESCRIPTION

This dual bridgewire initiator was developed for use as a standard initiator on aircraft, missiles and space launch vehicles. The initiator is qualified to MIL-DTL-23659, Rev F qualification, as well as MIL-STD-1512. This initiator represents one of the highest pedigrees available for Aerospace and Defense applications. This initiator provides the foundation for over 400 variations of our 103377 family of initiators.

PERFORMANCE

Output Pressure:	925 ± 165 psi, 10cc Volume
All-Fire Current:	3.5 amps minimum
Ignition Time:	≤ 10 milliseconds @ 3.5 amps
No-Fire Current:	1 amp/1 watt for 5 minutes
All-Fire Reliability:	3.5 amps, 0.999 at 95% Confidence
No-Fire Reliability:	1.0 amps, 0.001 at 95% Confidence
N.E.W.	194 mg

ELECTRICAL PROPERTIES

Bridgewire Resistance:	Pins A-B & C-D, 1.0 \pm 0.1 Ω
Shunt Resistance:	Pins B-C, 1.00 \pm 0.30 Ω
Insulation Resistance:	≥ 100 Megohms @ 500 VDC
Dielectric Strength:	< 0.1 mA @ 500 VDC
Electrostatic Discharge:	25,000 VDC per MIL-DTL-23659

SERVICE LIFE ASSESSMENT

MECHANICAL PROPERTIES

Body Material:	Stainless 304L
Recommended O-Ring:	2-009
Recommended Port:	MS16142 or MS33649
Torque:	45 inch-pounds
Leakage:	1 x 10 ⁻⁶ cc He/sec @1 atm
Weight:	0.05 pounds maximum

THERMAL CHARACTERISTICS

Operating Temp:	-80°F to +300°F	
Temp Shock/Humidity/Altitude:		
-65°F to +160°F / 95% RH / 70,000	feet (0.65 psi)	

The unit (exclusive of O-Ring cabling and interfacial seal) has a life service of 240 months (20 years) by similarity to part number 103377-32 pressure cartridge NSWC IHTR1852, March 1996.

