

SPACE STANDARD INITIATOR

DESCRIPTION

The 103377-500 initiator achieves the performance capabilities of a NASA Standard Initiator (NSI). This initiator leverages the original 103377 Family of initiators qualified to MIL-I-23659, as well as MIL-STD-1512. The 103377-500 was developed as a commercial off-the-shelf version with its specific pedigree to the Delta launch vehicle Bolt Cutter Initiator, P/N 103377-191, THAAD missile Shroud Initiator, P/N 103377-429, and the Atlas/Ariane launch vehicle Satellite Release Initiator, P/N 103377-449.



PERFORMANCE

Output Pressure:	650 ± 125 psi in a 10cc Bomb
All-Fire Current:	3.5 amps to 21.0 amps 50 ms 40 V, 680 uF cap @ -260°F
No-Fire Current:	1 amp/1 watt for 5 minutes
Ignition Time:	≤ 10 milliseconds

MECHANICAL CHARACTERISTICS

Thread:	.375-24UNJF-3A
O-Ring:	0034-6045 S0383-70
Leakage:	Hermetic, 1 x 10 ⁶ scc He/sec at 1 atm
Weight:	12 grams maximum
Torque:	125 in-lbs +/- 25

ELECTRICAL PROPERTIES

Bridgewire Resistance:	1.05 ± 0.10 Ω
Insulation Resistance:	≥ 2 Megohms @ 500 VDC
Electrostatic Discharge:	25 kVDC from 500pF Cap ESD Safe

THERMAL CHARACTERISTICS

Thermal Cycling:	-260°F to +300°F per MIL-STD-1576, Method 3407, 20 cycles
Thermal Shock:	-260°F to ambient MIL-STD-810, 503.5, 4 cycles (4th cycle held at -320°F for 11 hours)

