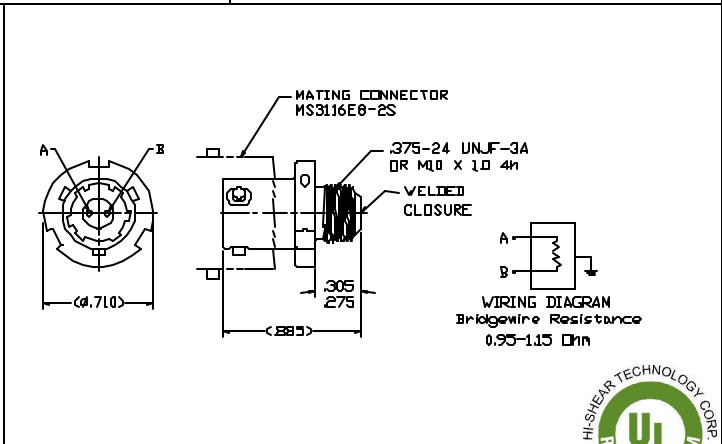




24225 GARNIER STREET · TORRANCE · CALIFORNIA 90505-5355 · U.S.A.  
 TELEPHONES: (310) 784-2100 · (800) 733-0321 · FAX: (310) 326-0797  
 E-mail: marketing@hstc.com

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| NASA Standard Initiator (NSI)  | Revision: B Page 1 of 2  | Date: 12DEC00  |
|--|--|--|
| DEVICE   | 1A/1W INITIATOR  | DISPOSITIF   |
| TYPE   | PN SEB 26100001  | REFERENCE  |
| 1. PERFORMANCES<br><ul style="list-style-type: none"> <li>All-Fire current (Bruceton Method)</li> <li>No-fire current</li> <li>Functioning time</li> <li>Hermeticity</li> <li>Redundancy</li> <li>Nominal peak pressure, 10 cc</li> </ul>  | 3.5 A(R< 0,999 95%) +77°F<br><br>1A/1W – 5 min (-165°F +165°F)<br>< 2ms (I= 5A)<br>< 10 <sup>-6</sup> atm. Cm <sup>3</sup> / s (He) b.a.f<br><br>650 ± 125 psi | 1. PERFORMANCES<br><ul style="list-style-type: none"> <li>Courant de feu 100% (Method de Bruceton)</li> <li>Courant de non-feu</li> <li>Temps de fonctionnement</li> <li>Herméticité</li> <li>Redondance</li> <li>Pression nominal</li> </ul>  |
| 2. MECHANICAL CHARACTERISTICS<br><ul style="list-style-type: none"> <li>Weight</li> <li>Electric connection</li> </ul> <p style="text-align: center;">MATERIALS</p> <ul style="list-style-type: none"> <li>Body</li> <li>Leads or connector</li> <li>Hermetic seal               <ul style="list-style-type: none"> <li>Feed through</li> <li>Front</li> </ul> </li> </ul> | 11 g<br>MS53116ES-2S/ NBS9GE8-2SE<br><br>Stainless steel Inconel 718<br>Kovar pins<br><br>Glass to metal seal  | 2. CARACTERISTIQUES MECANIKUES<br><ul style="list-style-type: none"> <li>Masse</li> <li>Connexion électrique</li> </ul> <p style="text-align: center;">MATERIAUX</p> <ul style="list-style-type: none"> <li>Corps</li> <li>Câblage ou connecteur</li> <li>Herméticité               <ul style="list-style-type: none"> <li>Passage électrique</li> <li>Avant</li> </ul> </li> </ul>              |
| FIXING MODE  | Thread 3/8-24 UNJF/M10 x 1.0 4h  | MODE DE FIXATION   |
| INSTALLATION TORQUE  | 95 – 105 inch pounds   | TORSION D' INSTALATION   |
| 3. ELECTRICAL CHARACTERISTICS<br><ul style="list-style-type: none"> <li>Bridgewire number</li> <li>Bridgewire resistance</li> <li>Insulation resistance</li> <li>Leads resistivity</li> <li>Dielectric strength</li> <li>Static sensitivity               <ul style="list-style-type: none"> <li>All leads shorted to case</li> <li>Between leads</li> </ul> </li> </ul>   | 1<br>1.05 ± 0.1 Ω<br>> 1000 M Ω / 500 VDC<br><br>> 100 μ A / 200 VAC<br><br>25 Kv / 500 pF   | 3. CARACTERISTIQUES ELECTRIQUES<br><ul style="list-style-type: none"> <li>Nombre de ponts-fusibles</li> <li>Résistance du filament</li> <li>Résistance d'isolement</li> <li>Résistance des conducteurs</li> <li>Rigidité diélectrique</li> <li>Décharges électrostatiques               <ul style="list-style-type: none"> <li>Entre circuit et masse</li> <li>Entre fils</li> </ul> </li> </ul> |
| CURRENT RATINGS<br><ul style="list-style-type: none"> <li>Nominal firing current</li> <li>All-fire current</li> <li>No-Fire current</li> <li>Safe no-fire current for testing</li> </ul>   | > 5 A / 4 ms<br>3.5 A (R<0,999 95%) +77°F<br>1A/1W 5min (-165°F +165°F)<br>< 10mA  | COURANTS LIMITES<br><ul style="list-style-type: none"> <li>Courant de mise à feu nominal</li> <li>Courant de feu 100%</li> <li>Courant maxi de non feu</li> <li>Courant maxi de contrôle</li> </ul>  |





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| <b>4. PYROTECHNIC CHARACTERISTICS</b> <ul style="list-style-type: none"> <li>Initiator type</li> <li>Principal pyrotechnic load</li> </ul>   | 114 mg ZPP powder   | <b>4. CARACTERISTIQUES PYROTECHNIQUES</b> <ul style="list-style-type: none"> <li>Type d'initiateur</li> <li>Charge pyrotechniques principale</li> </ul>   |
| <b>5. ENVIRONMENTAL TEST SPECIFICATIONS</b> <ul style="list-style-type: none"> <li>Mechanical shock</li> <li>Acceleration</li> <li>Sinusoidal vibration</li> <li>Random vibration @ -260°F</li> <li>Humidity</li> <li>Thermal shock</li> <li>Thermal vacuum</li> <li>Operating temperature</li> <li>Storage life</li> </ul>  | 100 g 6 shock impacts/11ms<br>3axes<br>100g / 11ms 3axis<br>25 Hz 2g<br>10 – 100 .01 - .08 6db/oct<br>100 – 400 0.8 constant<br>400 – 2 KC 0.6 – 0.16 3db/oct<br>MIL-E-5277C Proc. 1<br>-260°F +300°F 20 cycles 1hr<br>+300°F 1x10 <sup>-6</sup> Torr (650K alt)<br>-260°F 1x10 <sup>-6</sup> Torr (96 hr)<br>-420°F +300°F<br>15 years | <b>5. RESISTANCE AUX CONDITIONS D'ENVIRONNEMENT</b> <ul style="list-style-type: none"> <li>Shocs mécaniques</li> <li>Accélération</li> <li>Vibrations sinusoidales</li> <li>Vibrations aléatoires</li> <li>Humidité</li> <li>Chocs thermiques</li> <li>Vide thermique</li> <li>Températures de fonctionnement</li> <li>Durée de stockage</li> </ul>   |
| <b>6. DEVELOPMENT STATUS</b> <ul style="list-style-type: none"> <li>References:               <ul style="list-style-type: none"> <li>Development date</li> <li>Qualification test report</li> <li>Last verification of qualification date</li> </ul> </li> <li>Flight applications:               <ul style="list-style-type: none"> <li>Projects</li> <li>Dates</li> <li>Users</li> </ul> </li> </ul> | 1980 NASA<br>SEB 26100001-2877<br>1991<br><br>Space Shuttle, US satellites<br>1980 – present<br>NASA, ESA, BAC, MATRA,<br>BOEING, HUGHES,<br>LOCKHEED   | <b>6. CONDITIONS DE DEVELOPPEMENT</b> <ul style="list-style-type: none"> <li>Références:               <ul style="list-style-type: none"> <li>Date du développement</li> <li>Rapport de qualification</li> <li>Contrôls de qualification ultérieurs</li> </ul> </li> <li>Applications spatiales:               <ul style="list-style-type: none"> <li>Projets</li> <li>Dates</li> <li>Utilisateurs</li> </ul> </li> </ul> |

