NOTES:

1. REQUIREMENTS:
   A. ENCAPSULATION: GLASS. UNITS SHALL BE HERMETICALLY SEALED.
   B. LEAD MATERIAL SHALL BE IRON-NICKEL ALLOY, COPPER CLAD, GOLD PLATED IN ACCORDANCE WITH MIL-C-10154. A CERTIFICATE OF COMPLIANCE WITH THIS REQUIREMENT SHALL ACCOMPANY EACH SHIPMENT.
   C. SHALL WITHSTAND A THERMAL SHOCK OF 100°C FROM 0°C WITHIN 30 SECONDS AND BE RETURNED TO ROOM AMBIENT WITHOUT AFFECTING OPERATING CHARACTERISTICS AS SPECIFIED HEREIN, IN ADDITION TO THE REQUIREMENTS OF NO 100000.
   D. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS OF MIL-S-39491 SECTION II.
   E. UNITS SHALL BE 100 PERCENT INSPECTED FOR COMPLIANCE WITH THE REQUIREMENTS IN TABLE I UNLESS OTHERWISE SPECIFIED.
   F. TRANSIENT RESPONSE: USING A TECHROM'S TYPE S PLUG-IN UNIT AND 10 V MILLIAMPERES AND 10 MILLIAMPERES, THE MEASURED TIME MUST BE LESS THAN .5 MICROSECOND. THE SLOPE OF THAT PORTION OF THE DISCHARGE CURVE CORRESPONDING TO LINEAR CAPACITANCE SHALL BE GREATER THAN .5 VOLTS AND .2 MICROSECOND.
   G. LEAD TESTS: EACH LEAD SHALL BE CAPABLE OF WITHSTANDING THE FOLLOWING TESTS:
      (1) LEAD BEND TEST: WITH THE CONDUCTIVE BODY HELD IN A VERTICAL POSITION AND A ONE POUND WEIGHT SUSPENDED IN AN AXIAL DIRECTION. THE LEAD UNDER TEST, 2 CYCLES OF BENDS SHALL BE COMPLETED WITH ONE CYCLE OF BENDS CONSIST OF MOVING THE BODY OF THE UNIT IN THE SAME PLANE THROUGH 90 DEGREES IN ONE DIRECTION AND BACK 90 DEGREES IN THE OPPOSITE DIRECTION. NO MECHANICAL DAMAGE OR LACK OF PERFORMANCE SHALL BE EVIDENCED AFTER THE TEST.
      (2) LEAD PULL TEST: EACH LEAD SHALL WITHSTAND AN AXIAL PULL OF A POUNDS MINIMUM. NO MECHANICAL DAMAGE OR LACK OF PERFORMANCE SHALL BE EVIDENCED AFTER THE TEST.
   H. EACH DIODE SHALL BE MICROSCOPICALLY INSPECTED, BEFORE PAINTING, UNDER 100X MAGNIFICATION, FOR FOREIGN PARTICLES, TIPPED DOTS, AND IRREVERSIBLE DAMAGE AT POINT OF FUSING.
   I. PREPARATION FOR DELIVERY: IN ACCORDANCE WITH MIL-S-16991 LEVEL C PRESERVATION AND PACKAGING AND LEVEL C PACKING. MARKING OF UNIT PACKAGES AND EXTERIOR SHIPPING CONTAINERS SHALL INCLUDE THE NASA DRAWING NUMBER AND REVISION LETTER.
   J. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-S-70327.

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© REPLACES REV B WITH CHANGE
### TABLE I

**INSTRUCTION REQUIREMENTS**

**TEST CONDITIONS**: AT EXISTING LOCAL ATMOSPHERIC PRESSURE AND 25°C ± 3°C

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>SYMBOL</th>
<th>CONDITIONS</th>
<th>MIN</th>
<th>MAX</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISUAL AND DIMENSIONAL DESCRIPTION</td>
<td>SEE NOTE G(1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEAD BEND</td>
<td>SEE NOTE G(1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEAD FUEL</td>
<td>SEE NOTE G(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INVERSE CURRENT</td>
<td>Ip</td>
<td>Vg = 15 VOLTS MIN</td>
<td>4</td>
<td>LB</td>
<td></td>
</tr>
<tr>
<td>REVERSE BREAKDOWN VOLTAGE</td>
<td>Vg</td>
<td>Ig = 100 uA MAX</td>
<td>30</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>FORWARD SURGE CURRENT</td>
<td>Ip</td>
<td>1 SEC MIN</td>
<td>-0.1 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FORWARD VOLTAGE DROP (PEAK)</td>
<td>Vf</td>
<td>If = 40 MA</td>
<td>0.75</td>
<td>0.85 V</td>
<td></td>
</tr>
<tr>
<td>FORWARD VOLTAGE DROP (PEAK)</td>
<td>Vf</td>
<td>If = 400 MA</td>
<td>2.25</td>
<td>V</td>
<td></td>
</tr>
</tbody>
</table>

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LIST OF MATERIALS

MATERIAL

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS DECIMALS ANGLES MATERIAL DO NOT SCALE THIS DRAWING

HEAT TREATMENT MEAT ASSAY USED ON FINAL FINISH

MANNED SPACECRAFT CENTER HOUSTON, TEXAS

SEMICONDUCTOR DEVICE, DIODE,

SPECIFICATION CONTROL DRAWING

NASA APPROVED INSTRUMENTATION LAB

M.I.T.

MIT APPROVED

MIT APPROVED

NASA APPROVED

CODE DENT NO. SIZE NASA DRAWING NO. 1006751

INCHES

PHOTOGRAPHIC SCALE ONLY