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 NASA DOCUMENT PS 1015401. A CERTIFICATE OF COMPLIANCE WITH THIS REQUIREMENT SHALL ACCOMPANY EACH SHIPMENT.
   C. SHALL WITHSTAND A THERMAL SHOCK OF 300°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 MD 1002000.
   D. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS OF NASA DOCUMENT 1015404 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 TECHTRONIX TYPE S PLUG-IN UNIT AND Ip = 5 MILLIAMPERES AND Ir = 100 MICROAMPERES, 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 COMPONENT BODY HELD IN A VERTICAL POSITION AND A ONE POUND WEIGHT SUSPENDED IN AN AXIAL DIRECTION FROM THE LEAD UNDER TEST, 2 CYCLES OF BENDS SHALL BE ACCOMPLISHED. ONE CYCLE OF BENDS SHALL CONSIST OF MOVING THE BODY OF THE UNIT IN THE SAME PLANE THROUGH 90 DEGREES IN ONE DIRECTION THEN BACK 180 DEGREES IN THE OPPOSITE DIRECTION AND BACK 90 DEGREES TO THE ORIGINAL POSITION. 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 4 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 10X MAGNIFICATION, FOR FOREIGN PARTICLES, TIPPED DICE, INCOMPLETE SEALING, AND REDUCTION OF LEAD DIAMETER AT POINT OF FUSING.
   I. PREPARATION FOR DELIVERY: IN ACCORDANCE WITH MIL-S-19491 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.
   2. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

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CLASS B RELEASE TDR No. 00165
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SEMICONDUCTOR DEVICE, DIODE
SPECIFICATION CONTROL DRAWING

LIST OF MATERIALS

ORIGINAL SOURCE OF SUPPLY:
SEE QUALIFIED VENDOR LIST

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

SEE NOTE 1

HEAT TREATMENT
NEXT ASSY
APPLICATION

NON-APPROVAL
N/A
NONE

N/A
NONE

I.D. NO.

DRAWN
CHECKED
APPROVED
SIGNATURE

FOR INFORMATION ONLY
SEE NOTE |
TABLE I

INSTRUCTION REQUIREMENTS

<table>
<thead>
<tr>
<th>TEST CONDITIONS: AT EXISTING LOCAL ATMOSPHERIC PRESSURE AND 25°C ± 3°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARAMETER</td>
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<tr>
<td>VISUAL AND DIMENSIONAL INSPECTION</td>
</tr>
<tr>
<td>LEAD BEND</td>
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<tr>
<td>LEAD PULL</td>
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<tr>
<td>INVERSE CURRENT</td>
</tr>
<tr>
<td>REVERSE BREAKDOWN VOLTAGE</td>
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<tr>
<td>FORWARD SURGE CURRENT</td>
</tr>
<tr>
<td>FORWARD VOLTAGE DROP (PEAK)</td>
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<tr>
<td>FORWARD VOLTAGE DROP (PEAK)</td>
</tr>
</tbody>
</table>

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CLASS B RELEASE TDR No. 601/45 DATE 11/12/55

INSTRUMENTATION LAB CRAMER. MASS.

DWG. NO. CONTRACT APPROVAL

MANNED SPACECRAFT CENTER HOUSTON, TEXAS

SEMICONDUCTOR DEVICE, DIODE,

SPECIFICATION CONTROL DRAWING

NASA APPROVAL 1006751

CODE GENT NO SIZE

SCALE HT

SHMT 2 OF 2