REQUIREMENTS:

D. GENERAL:
A. INTERPRET DRAWING IN ACCORDANCE WITH THE STANDARDS PRESCRIBED BY MIL-D-7037.
B. ALL MATERIALS SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS CON- TAINED IN ND 1002034, CLASSES 2.
C. UNITS SHALL BE CAPABLE OF MEETING ALL QUALIFICATION REQUIREMENTS OF ND 1002056 INCLUDING THOSE SPECIFIED FOR NON-HERMETICALLY SEALED UNITS.
D. PARTS MARKING: PARTS SHALL BE PERMANENTLY AND LEGIBLY MARKED, IN ACCORDANCE WITH ND 1002019, WITH THE MANUFACTURER’S NAME AND/OR SYMBOL, LOT CODE OR NUMBER, TERMINAL IDENTIFICATION AND NASA PART NUMBER (DRAWDOWN NUMBER AND REVISION LETTER). NO MARKING SHALL APPEAR ON THE NYLON CASE.
E. PREPARATION FOR DELIVERY SHALL BE IN ACCORDANCE WITH ND 1002215, CLASS 2, CODE 1.

1. MARKING OF SHIPPING CONTAINERS SHALL CONFORM TO THE MARKING OF UNIT AND INTERMEDIATE PACKAGES AND THE METHODS OF MARKING AS SPECIFIED IN ND 1002215.

2. INTERPRET DRAWING IN ACCORDANCE WITH THE STANDARDS PRESCRIBED BY MIL-STD-7037.

2. ACCEPTANCE AND INSPECTION (100%):
A. MECHANICAL PROPERTIES:
(1) TENSION: SHALL BE AS SHOWN.
(2) SURFACE ROUGHNESS: 125 UNLESS OTHERWISE SPECIFIED.
B. RESISTANCE:
(1) LIGHT INTENSITY: PER TABLE.
(2) LIGHT OUTPUT WAVELENGTH: 5300 ANGSTROMS (NORMAL).
(2) PEAK CONTINUOUS VOLTAGE: 420V MAX. (840V PEAK-PEAK 800 CPS) TYP.

3. DESIGN REQUIREMENTS:
A. OPERATING LIFE: 2000 HOURS MINIMUM WITH A LOSS OF NOT MORE THAN 60% OF ORIGINAL LIGHT INTENSITY WHEN EXCITED PER 2.8.(1).

B. STORAGE LIFE: 1 YEAR MINIMUM WITHOUT LOSS OF ELECTRICAL PERFORMANCE AT O°C TO +40°C.

C. ELECTROLUMINESCENT DISPLAYS SHALL BE HERMETICALLY SEALED.
D. MATERIAL: ALUMINUM ALLOY.

4. FINISH:
A. CHROMATE TREATMENTS PER MIL-C-5541-(AL CASE) ALUM.
B. LIGHT OXIDATION: 125 UNLESS OTHERWISE SPECIFIED.
C. TOTAL CURRENT (ALL AREA ENERGIZED PER 2.8.(1)) 15.0 MA MAX.
D. LAMP CASE. 35K 34 25K 71 15K 105 71K 145.
E. CASE GND PIN 158 TO ALL OTHER PINS RESISTANCE: NOT 10.
G. BURN-IN (BY VENDOR): UNITS WHICH MEET INITIAL ELECTRICAL REQUIREMENTS SHALL BE MOUNTED IN A CASE CHECKED AT 0°C TO +90°C. GRADE 155 CASE GRADE 158 72F 153 72N 150 293 F.
I. LIGHT INTENSITY: UNITS WHICH MEET INITIAL ELECTRICAL REQUIREMENTS SHALL BE OPERATED FOR 100 HRS. AT ROOM TEMP. WHILE EXCITED PER 2.8.(1). BEFORE AND AFTER BURN-IN TESTING. CURRENT, AND PEAK FACTOR SHALL BE TAKEN AND SHIPPED WITH EACH PART.
J. A GRAY REINFORCEMENT BAR ACROSS THE FRONT FACE OF THE DISPLAY IS PERMISSIBLE.

REFERENCE:
[1] REFERENCE TO CONNECTOR PIN CHART.
[2] REFERENCE TO CONNECTOR PIN CHART.
[3] REFERENCE TO CONNECTOR PIN CHART.
[4] REFERENCE TO CONNECTOR PIN CHART.

REVISIONS:
A. REVISED PER TORR 28793.
B. REVISED PER TORR 29545.
C. REVISED PER TORR 34845.
D. REVISED PER TORR 37592.
E. REVISED PER TORR 32853.
F. REVISED PER TORR 39592.

APPLICATION:
[1] APPLICATION TO CONNECTOR PIN CHART.
[2] APPLICATION TO CONNECTOR PIN CHART.
[3] APPLICATION TO CONNECTOR PIN CHART.
[4] APPLICATION TO CONNECTOR PIN CHART.

NOTE:
[1] NOTE TO CONNECTOR PIN CHART.
[2] NOTE TO CONNECTOR PIN CHART.
[3] NOTE TO CONNECTOR PIN CHART.
[4] NOTE TO CONNECTOR PIN CHART.

MATERIAL:
[1] MATERIAL LIST.
[2] MATERIAL LIST.
[3] MATERIAL LIST.
[4] MATERIAL LIST.

LOT OF MATERIALS:
[1] LOT OF MATERIALS.
[2] LOT OF MATERIALS.
[3] LOT OF MATERIALS.
[4] LOT OF MATERIALS.
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A SPECIFICALLY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT RESERVES FOR ITSELF AN EXCLUSIVE RIGHT TO USE, REPRODUCE, MODIFY, ADAPT, REVEAL TO THE PUBLIC, OR DISTRIBUTE THESE DRAWINGS, SPECIFICATIONS, OR DATA OR ANY RESULTS OBTAINED FROM THEM, IN ANY MANNER OR FOR ANY PURPOSE, WITHOUT FURTHER AUTHORIZATION.

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**Diagram Details:**

- **Surface A:**
  - See Note (2/3) and (3/6/31).
  - Both sides.

- **Surface B:**
  - See Note (3/6/3).
  - Refer Design 7.
  - See detail B.

- **Orientation Type:**
  - For reference only.
  - Not to be marked on part.

- **Potting Holes B:**
  - Marking allowed in this area only.

- **Scratches and Marking:**
  - Not permitted in shaded area.

- **Cross Hatched Luminous Areas:**
  - To be continuously lit 250, 800 cycles wired together in light and brought out on pin 157.

- **CROSS HATCHED LUMINESCENT AREAS TO BE CONTINUOUSLY LIT 250 800 CYCLES WIRED TOGETHER IN LIGHT AND BROUGHT OUT ON PIN 157.**

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**Table Details:**

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<tr>
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<tr>
<td>1</td>
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<tr>
<td>2</td>
<td>Specification Control Drawing</td>
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**Material:**

- See Note

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**List of Materials:**

- **Capacitor Values:**
  - In microfarads.
- **Resistor Values:**
  - In ohms.

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**Drawing Information:**

- **MIT Instrumentation Lab:**
  - Cambridge, Mass.
- **Manned Spacecraft Center:**
  - Houston, Texas.
- **Indicator, Digital, Electroluminescent:**
  - Specification Control Drawing

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**Approval:**

- **Drawing:**
  - Approved by: [Signature]
  - Date: [Date]
  - Scale: [Scale]
<table>
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<tr>
<th>DASH NO.</th>
<th>NOTES</th>
<th>REFLECTION FROM DISPLAY SURFACE (MAX)</th>
<th>LIGHT INTENSITY (MIN)</th>
<th>BACKGROUND COLOR</th>
<th>CONTRAST RATIO (MIN)</th>
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<td>000</td>
<td>1 THRU 3 EXCEPT 3, G.(3)</td>
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<td>0.5 FOOT LAMBERTS INITIALLY, 1/2 FOOT LAMBERTS AFTER BURN-IN</td>
<td>- -</td>
<td>- -</td>
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<tr>
<td>001</td>
<td>1 THRU 3</td>
<td>- -</td>
<td>0.5 FOOT LAMBERTS INITIALLY, 1/2 FOOT LAMBERTS AFTER BURN-IN</td>
<td>- -</td>
<td>- -</td>
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<tr>
<td>002</td>
<td>1 THRU 3</td>
<td>20% MAX</td>
<td>7 FOOT LAMBERTS AFTER BURN-IN (BLACK)</td>
<td>0.11 IN A 300 FOOT CANDLE AMBIENT</td>
<td>0.11 IN A 300 FOOT CANDLE AMBIENT</td>
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