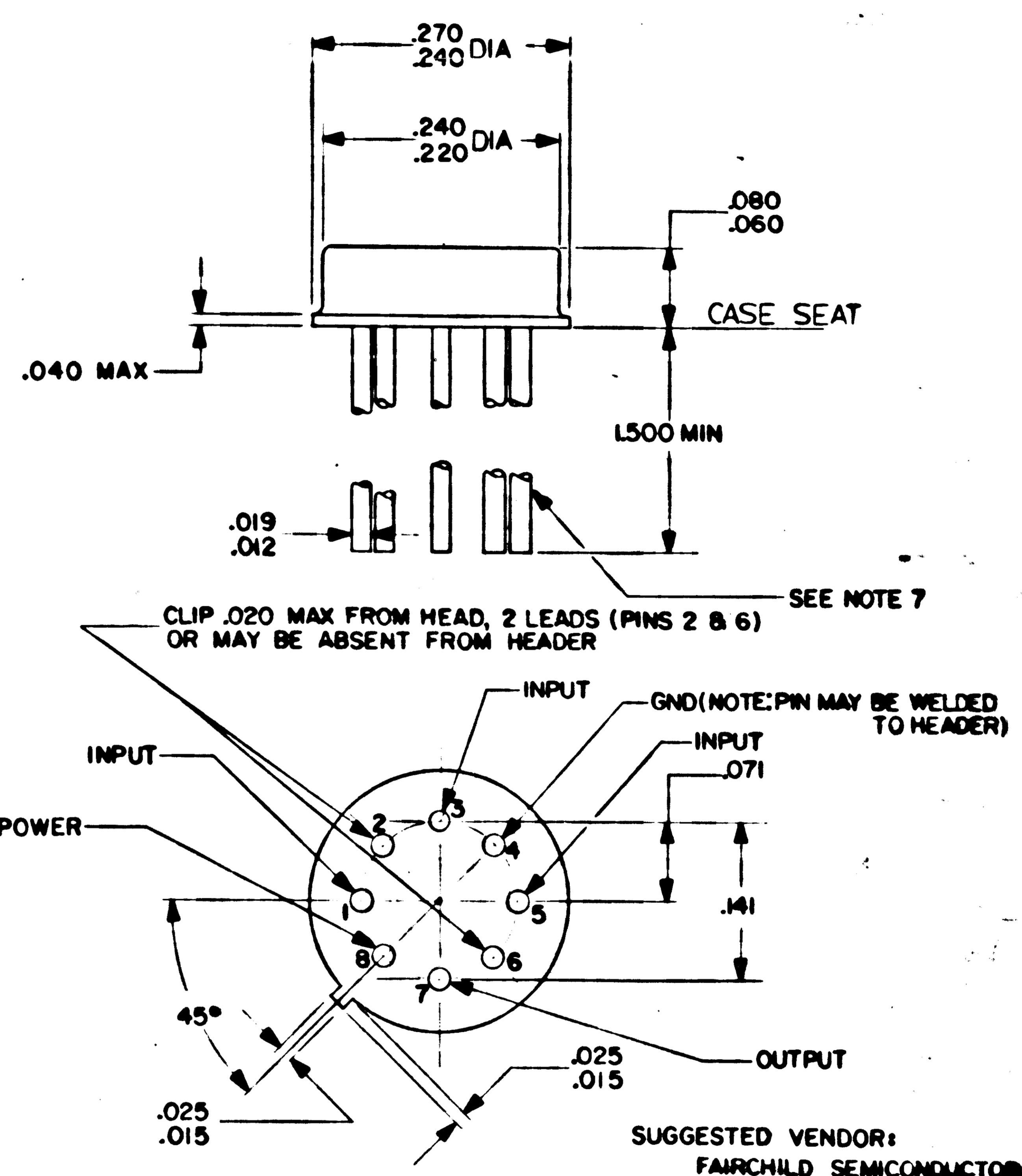


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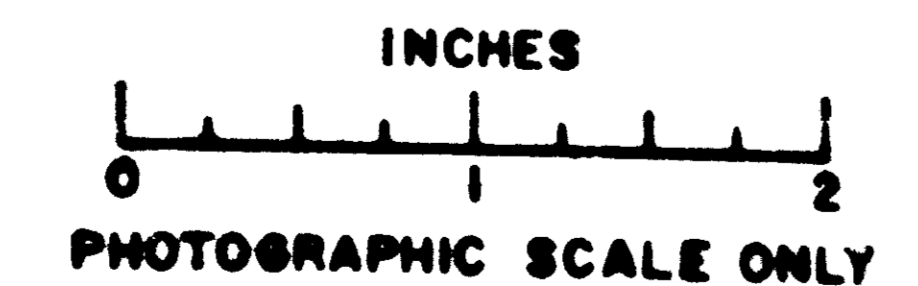
| REVISIONS |                                  |          |                    |
|-----------|----------------------------------|----------|--------------------|
| SYM       | DESCRIPTION                      | DATE     | APPROVAL           |
|           | TAKEN FROM DRAWING NO. C-88794-E | 7-19-62  |                    |
| A         | REVISED PER TDRR 00064           | 10-5-62  | <i>WR 10/5/62</i>  |
| B         | REVISED PER TDRR 00081           | 10-23-62 | <i>WR 10/23/62</i> |

- NOTES:
- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
  - THE SPECIFIED LEAD DIAMETER APPLIES TO THE ZONE BETWEEN .050 AND .250 FROM THE CASE SEAT. BETWEEN .250 AND THE END OF LEAD A MAXIMUM OF .021 IS HELD. OUTSIDE OF THESE ZONES THE LEAD DIAMETER IS NOT CONTROLLED.
  - MAXIMUM DIAMETER LEADS AT A GAGING PLANE  $.054 \pm .001$  BELOW CASE SEAT TO BE WITHIN .007 OF THEIR TRUE LOCATION RELATIVE TO MAX. WIDTH TAB AND TO THE MAXIMUM .270 DIAMETER MEASURED WITH A SUITABLE GAGE. WHEN GAGE IS NOT USED, MEASUREMENT WILL BE MADE AT SEATING PLANE.
  - INDEX TAB FOR VISUAL ORIENTATION ONLY.
  - MEASURED FROM MAX. DIAMETER OF THE ACTUAL DEVICE.
  - LEAD MAT. ND1002001
  - PIN 4 ELECTRICALLY CONNECTED TO CASE



| DESIGN PARAMETERS 25°C AMBIENT (UNLESS OTHERWISE SPECIFIED) |                    |       |      |       |                |       |         |                |
|---|--------------------|-------|------|-------|----------------|-------|---------|----------------|
| PARAMETER   | CONDITIONS AT PINS |       |      |       |                |       | MIN     | MAX            |
|   | 1                  | 3     | 4    | 5     | 7              | 8     |         |                |
| BASE CURRENT I <sub>1</sub>                                 | .785V              | .790V | GND  | .790V |                | +3.0V |         | .680 ma        |
| BASE CURRENT I <sub>2</sub>                                 | .790V              | .785V |      | .790V |                |       |         | .680 ma        |
| BASE CURRENT I <sub>3</sub>                                 | .790V              | .790V |      | .785V |                |       |         | .680 ma        |
| OUTPUT VOLTAGE PIN 7  | .785V              | OPEN  |      | OPEN  | V <sub>o</sub> |       |         | .400V          |
| OUTPUT VOLTAGE PIN 7  | OPEN               | .785V |      | OPEN  | V <sub>o</sub> |       |         | .400V          |
| OUTPUT VOLTAGE PIN 7  | OPEN               | OPEN  |      | .785V | V <sub>o</sub> |       |         | .400V          |
| OUTPUT CURRENT AT PIN 7                                     | .540V              | .540V |      | .540V | .785V          |       | 3.48 Ma |                |
| SATURATION VOLTAGE  | 1.20V              | OPEN  |      | OPEN  | V <sub>s</sub> |       |         | .35V           |
| SATURATION VOLTAGE  | OPEN               | 1.20V |      | OPEN  | V <sub>s</sub> |       |         | .35V           |
| SATURATION VOLTAGE  | OPEN               | OPEN  |      | 1.20V | V <sub>s</sub> |       |         | .35V           |
| LEAKAGE CURRENT I <sub>CE</sub>                             | OPEN               | OPEN  | GND  | OPEN  | 5.0V           | +3.0V |         | 100 MICRO AMPS |
| EMITTER BASE REVERSE CURRENT I <sub>EB0</sub>               | GND                | GND   | 6.5V | GND   | OPEN           | OPEN  |         | 1 ma           |
| COLLECTOR CUTOFF CURRENT I <sub>CB</sub>                    | GND                | GND   | OPEN | GND   | 8.0V           | OPEN  |         | 1 ma           |

| MAXIMUM RATINGS AT 25°C                  |                 |
|--|-----------------|
| MAXIMUM VOLTAGE TO PIN 8                 | +15.0 VOLTS     |
| MAXIMUM VOLTAGE APPLIED TO ANY INPUT PIN | ±4.0 VOLTS      |
| STORAGE TEMPERATURE                      | -65°C TO +200°C |
| OPERATING TEMPERATURE                    | 0 TO 70°C       |
| MAXIMUM AVERAGE PROPAGATION DELAY        | 75n.SEC         |
| FAN OUT OF 5 WITH FAN IN OF 3            | 0 TO 70°C       |



BOTTOM VIEW  
FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00027 DATE 7-19-62

| QTY REQD                                    | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION  | FIND NO.                    |
|---|-------------------------|--|-----------------------------|
| LIST OF MATERIALS                           |                         |  |                             |
| MIT INSTRUMENTATION LAB<br>CAMBRIDGE, MASS. |                         | MANNED SPACECRAFT CENTER<br>HOUSTON, TEXAS                                     |                             |
| DRAWN R. CHIN DATE 7-19-62                  |                         | <b>MICRO-NOR GATE<br/>(TO 47 SIZE)</b><br><b>SPECIFICATION CONTROL DRAWING</b> |                             |
| CHECKED <i>Joe Martin</i>                   |                         |  |                             |
| APPROVAL <i>W.B. Turner</i>                 |                         |  |                             |
| APPROVAL <i>Brian C. Hall</i>               |                         | CODE IDENT NO.   | SIZE                        |
| NASA APPROVAL <i>[Signature]</i> 7-19-62    |                         | C  | NASA DRAWING NO.<br>1006771 |
| MIT APPROVAL <i>[Signature]</i> 9/13/62     |                         | SCAL. NONE   | WT # SHEET 1 OF 1           |

|   |                 |
|---|-----------------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON |                 |
| FRACTIONS   | DECIMALS ANGLES |
| $\pm$   | $\pm$ $\pm$     |
| DO NOT SCALE THIS DRAWING   |                 |
| MATERIAL  |                 |
| HEAT TREATMENT  |                 |
| FINAL FINISH  |                 |
| NEXT ASSY   | USED ON         |
| APPLICATION   |                 |