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**REQUIREMENTS:**

**1. GENERAL:**

- A. UNITS SHALL BE CAPABLE OF MEETING THE REQUIREMENTS OF SPECIFICATION MIL-R-26 FOR INSULATED TYPE; EXCEPT AS SPECIFIED HEREIN.
- B. UNITS SHALL BE CAPABLE OF MEETING THE QUALIFICATION REQUIREMENTS SPECIFIED IN ND 1002057 UNLESS MODIFIED OR AMENDED BY THE DESIGN REQUIREMENTS SECTION OF THIS DRAWING.
- C. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN ND 1015404, CLASS 2.
- D. INTERPRET DRAWING SYMBOLS, ABBREVIATIONS AND REFERENCE DESIGNATIONS IN ACCORDANCE WITH GOVERNMENT STANDARDS PRESCRIBED IN MIL-D-70327.
- E. PACKAGING: UNITS SHALL BE PACKAGED IN ACCORDANCE WITH ND 1002129.

**2. INSPECTION AND ACCEPTANCE**

- A. ELECTRICAL REQUIREMENTS:
  - (1) RESISTANCE VALUE: PER TABLE
  - (2) RESISTANCE TOLERANCE:  $\pm 1\%$
- B. MECHANICAL REQUIREMENTS:
  - (1) LEADS: IRON NICKEL ALLOY COPPER CLAD GOLD PLATED PER NASA SPECIFICATION PS 1015401. A CERTIFICATE OF COMPLIANCE OF LEAD MATERIAL SHALL ACCOMPANY EACH LOT SHIPPED.
  - (2) MARKING: MARK UNITS PER ND1002019 WITH MANUFACTURER'S NAME AND/OR SYMBOL, NASA PART NUMBER, AND REVISION LETTER, DATE CODE. MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART OR PACKAGE. MARKING OF UNIT PACKAGES AND EXTERIOR SHIPPING CONTAINERS SHALL INCLUDE NASA PART NUMBER AND REVISION LETTER, PER MIL-STD-129.

**3. DESIGN REQUIREMENTS:**

- A. PER MIL-R-26 EXCEPT AS MODIFIED BY THIS DRAWING.
- B. POWER RATING: 1 WATT AT +25°C, DERATED PER CHART.
- C. TEMPERATURE COEFFICIENT:  $\pm 30$  PPM/°C UP TO +275°C.
- D. EACH LEAD SHALL BE CAPABLE OF WITHSTANDING TWO (2) BENDS UNDER A TWO (2) POUND VERTICAL PULL (LEADS VERTICAL WITH RESPECT TO UNIT BODY). TWO (2) BENDS SHALL BE ACCOMPLISHED BY MOVING THE BODY OF THE UNIT, WHILE IN THE SAME PLANE, THROUGH 90° IN ONE DIRECTION, THEN BACK 180° TO THE OPPOSITE DIRECTION, THEN BACK 90° TO THE ORIGINAL POSITION. NO MECHANICAL DAMAGE OR LACK OF PERFORMANCE SHALL BE EVIDENCED AFTER THE TEST.
- E. MECHANICAL STRENGTH: PER MIL-R-26 EXCEPT 5 LB. MAX LOAD

**4. SPECIAL CONDITIONING BY SUPPLIER:**

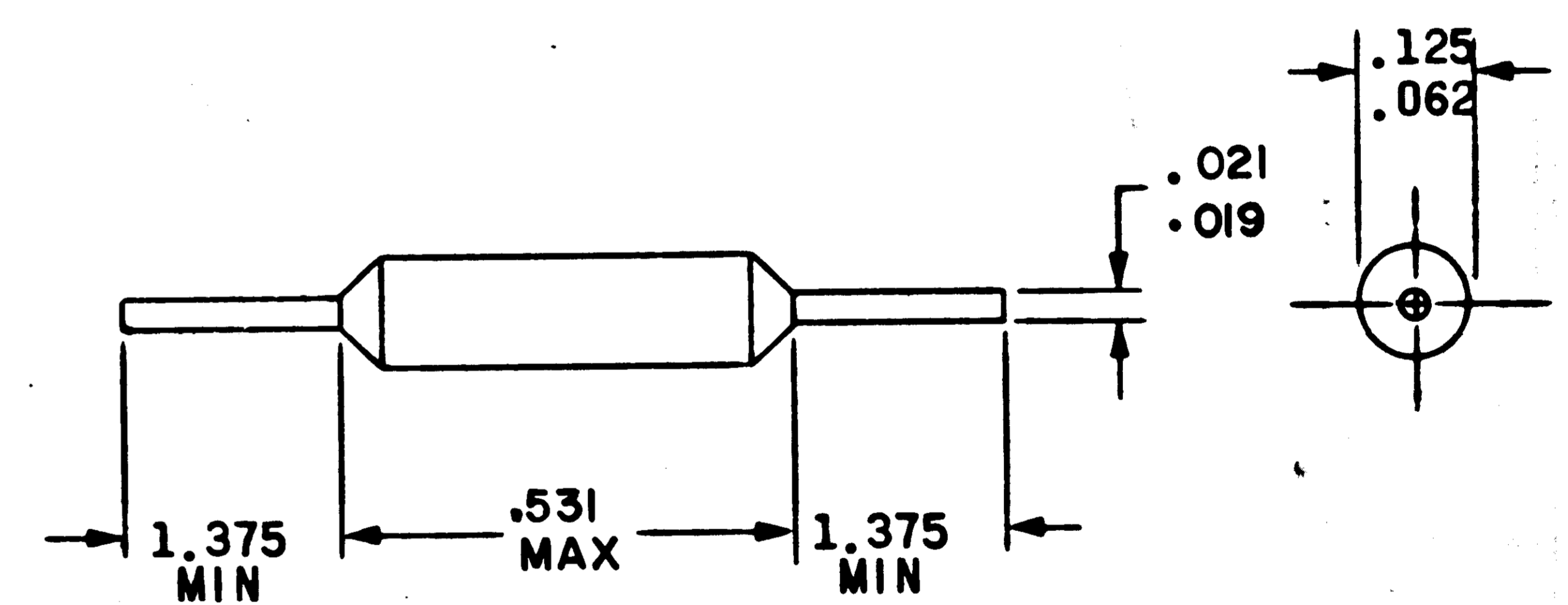
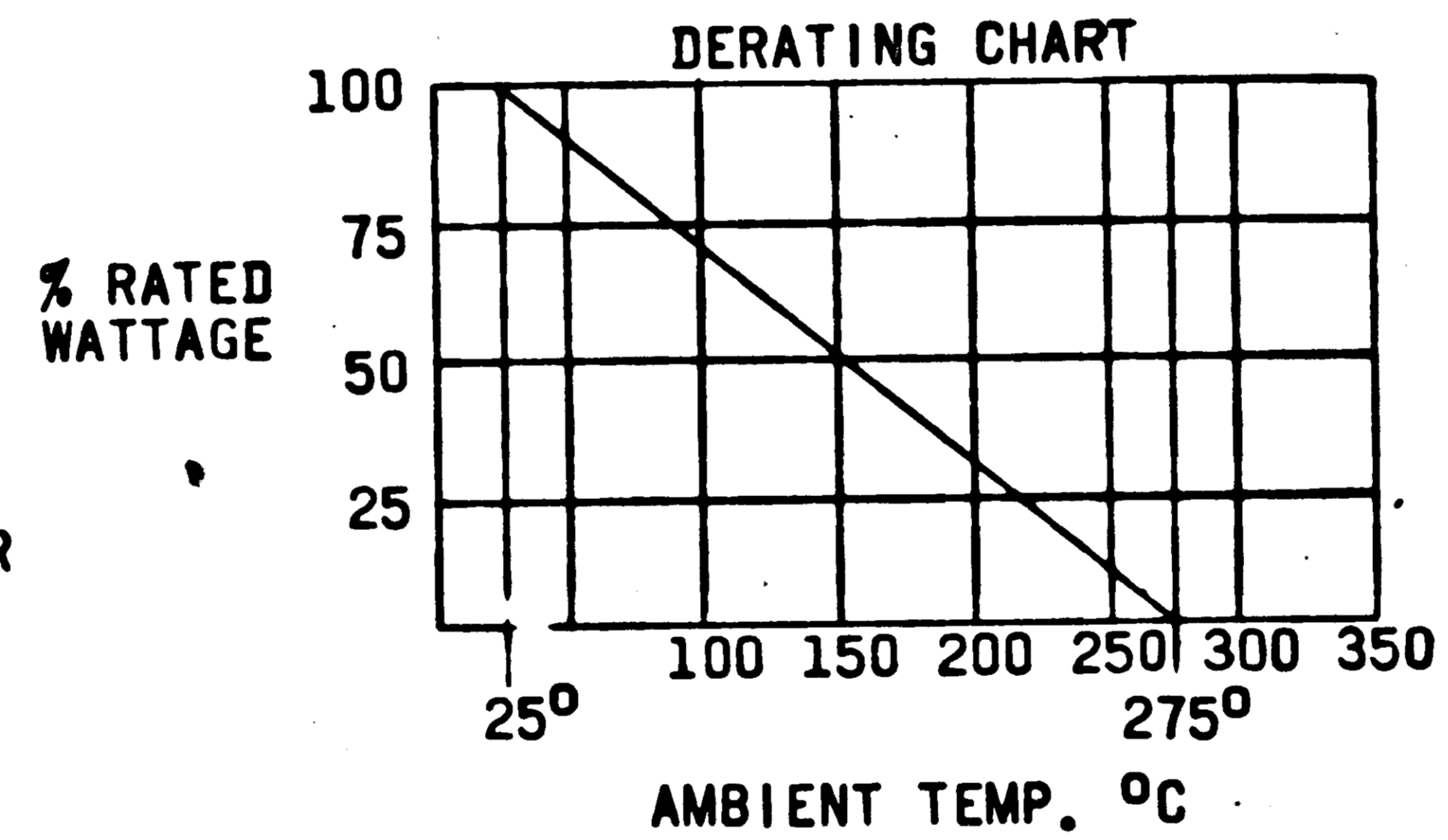
- A. BURN-IN: UNITS SHALL BE BURNED-IN FOR 100 HRS AT 25°C AND RATED WATTAGE 1-1/2 HRS ON, 1/2 HR OFF, UNITS THAT EXCEED THE INITIAL TOLERANCE OR CHANGE MORE THAN .5% SHALL BE REJECTED.

PROCURE ONLY FROM APPROVED SOURCES LISTED IN ND 1002034 FOR THIS DRAWING.

| NASA PART NUMBER | RESISTANCE OHMS NOMINAL | NASA PART NUMBER | RESISTANCE OHMS, NOMINAL |
|------------------|-------------------------|------------------|--------------------------|
| 1                | 600                     | 23               | 1                        |
| 2                | 610                     | 24               | 2                        |
| 3                | 620                     | 25               | 3                        |
| 4                | 630                     | 26               | 4                        |
| 5                | 640                     | 27               | 5                        |
| 6                | 650                     | 28               | 6                        |
| 7                | 660                     | 29               | 7                        |
| 8                | 670                     | 30               | 8                        |
| 9                | 680                     | 31               | 9                        |
| 10               | 690                     | 32               | 10                       |
| 11               | 700                     | 33               | 100                      |
| 12               | 710                     | 34               | 1800                     |
| 13               | 720                     | 35               | 430                      |
| 14               | 730                     | 36               | 0.75                     |
| 15               | 740                     | 37               | 300                      |
| 16               | 750                     | 38               | 3300                     |
| 17               | 760                     | 39               | 2000                     |
| 18               | 770                     | 40               | 16                       |
| 19               | 780                     | 41               | 18                       |
| 20               | 790                     | 42               | 20                       |
| 21               | 800                     | 43               | 22                       |
| 22               | 1000                    | 44               | 24                       |
|                  |                         | 45               | 360                      |
|                  |                         | 46               | 510                      |
|                  |                         | 47               | 1300                     |
|                  |                         | 48               | 75                       |
|                  |                         | 49               | 40                       |
|                  |                         | 50               | 1500                     |

090101

| REVISIONS |  |         |          |
|-----------|--|---------|----------|
| SYM       | DESCRIPTION                            | DATE    | APPROVAL |
| -         | INITIAL RELEASE CLASS A PER TDRR 02599 | 8/14/63 | WK       |
| A         | REVISED PER TDRR 03702                 | 8/20/63 | WK       |
| B         | REVISED PER TDRR 06773                 | 8/10/64 | RPK WK   |
| C         | REVISED PER TDRR 07104                 | 3/21/64 | RPK WK   |
| D         | REVISED PER TDRR 07314                 | 3/24/64 | RPK WK   |
| E         | REVISED PER TDRR 10810                 | 7/17/64 | WK       |
| F         | REVISED PER TDRR 10925                 | 7/21/64 | WK       |
| G         | REVISED PER TDRR 11136                 | 7/28/64 | WK       |
| H         | REVISED PER TDRR 14481                 | 12-1-64 | WK       |
| J         | REVISED PER TDRR 16595                 | 3/21/64 | WK       |



|   |                         |   |                  |
|---|-------------------------|---|------------------|
| QTY REQD  | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION   | FIND NO.         |
| LIST OF MATERIALS   |                         |   |                  |
| MIT INSTRUMENTATION LAB<br>CAMBRIDGE MASS NAS<br>CONTRACT 9-497 |                         | MANNED SPACECRAFT CENTER<br>HOUSTON, TEXAS                            |                  |
| DRAWN <i>L. J. Peake</i> DATE 24 JUL 63                         |                         | RESISTOR, FIXED, WIREWOUND<br>1 WATT<br>SPECIFICATION CONTROL DRAWING |                  |
| CHECKED <i>J. J. Peake</i> DATE 27 JUL 63                       |                         |   |                  |
| APPROVAL <i>L. J. Peake</i> 8/13/63                             |                         | CODE IDENT NO.  | NASA DRAWING NO. |
| APPROVAL <i>W. J. Peake</i> 8-14-63                             |                         | SIZE <b>C</b>   | <b>1010604</b>   |
| MIT APPROVAL <i>W. J. Peake</i> 8/13/63                         |                         | SCALE NONE  | WT               |
| APPLICATION   |                         | SHEET 1 OF 1  |                  |

|   |
|---|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES |
| TOLERANCES ON FRACTIONS DECIMALS ANGLES             |
| DO NOT SCALE THIS DRAWING                           |
| MATERIAL SEE NOTES                                  |
| HEAT TREATMENT NONE                                 |
| FINAL FINISH NONE                                   |
| NEXT ASSY USED ON                                   |
| APPLICATION   |