

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY FOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONFERRING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

A	1006714	REVISIONS		02821
		SYM	DESCRIPTION	DATE
		A	REVISED PER TDRR 19734	6/8/65 WK.

NOTES:

1. GENERAL REQUIREMENTS:

- A. INTERPRET DRAWING IN ACCORDANCE WITH THE STANDARDS PRESCRIBED BY MIL-D-70327.
- B. UNITS SHALL BE IN ACCORDANCE WITH MIL-R-93/20 (TYPE R871) AS SPECIFIED BELOW WITH EXCEPTIONS.
- C. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS CONTAINED IN ND 1015404, CLASS 2.
- D. UNITS SHALL BE CAPABLE OF MEETING THE QUALIFICATION REQUIREMENTS OF ND 1002057.
- E. UNITS SHALL BE PERMANENTLY AND LEGIBLY MARKED, PER ND 1002019 WITH THE RESISTANCE VALUE, WATTAGE AND NASA PART NUMBER (DRAWING NUMBER AND REVISION LETTER). PACKAGES SHALL BE MARKED, PER MIL-STD-129, WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, LOT CODE, DATE OF MANUFACTURE OR DATE CODE AND THE NASA PART NUMBER.

B. 100 HOUR SHORT TERM STABILITY REQUIREMENTS:

EACH RESISTOR SHALL BE ENERGIZED AT FULL RATED POWER (40%) AT 125°C +0° FOR A PERIOD OF 100 +2 HOURS.
-5°C -0

POWER SHALL BE APPLIED FOR AT LEAST 98 HOURS WITH ONE TURN OFF PERIOD OF AT LEAST ONE(1) HOUR NEAR THE FIFTY(50) HOUR INTERVAL. MEASUREMENTS SHOULD BE TAKEN AND DATA RECORDED BEFORE AND AFTER TEST. THESE MEASUREMENTS ARE TO BE TAKEN WITHIN ONE(1) HOUR BEFORE START AND AFTER TEST. MEASUREMENT TEMPERATURES SHALL BE WITHIN ONE(1) DEGREE CENTIGRADE OF EACH OTHER AND CORRECTED TO 0.2°C. TOTAL RESISTANCE CHANGE AS A RESULT OF THE STABILITY TEST SHOULD NOT EXCEED 400 PPM.

C. EACH RESISTOR SHALL BE SERIALIZED AND RESISTANCE MEASUREMENTS TAKEN AND SUPPLIED WITH SHIPMENT AT 0°C ± 0.1°C, 25°C ± 0.1°C, 50°C ± 0.1°C AND 70°C ± 0.1°C.

2. ACCEPTANCE AND INSPECTION:

A. MECHANICAL PROPERTIES:

(1) LEAD MATERIAL: NICKEL PER ND.PS 1015400. MATERIAL CERTIFICATION SHALL ACCOMPANY EACH SHIPMENT.

B. ELECTRICAL CHARACTERISTICS (AT 25 ± 0.1°C UNLESS OTHERWISE SPECIFIED):

- (1) RESISTANCE VALUE: 4000 OHMS.
- (2) RESISTANCE TOLERANCE: ± 1%
- (3) RESISTANCE-TEMPERATURE CHARACTERISTIC (FROM +25° TO +105°C): +4300 ± 300 PPM/°C.

3. DESIGN REQUIREMENTS: 0 ± 100 PPM/°C

A. RATINGS:

- (1) MAXIMUM WORKING VOLTAGE: 100 VOLTS.
- (2) POWER DISSIPATION: 1.25 WATTS AT +105°C DERATED LINEARLY TO 1.10 WATTS AT +125°C. (SEE FIGURE 1.)
- (3) RESISTANCE VALUE STABILITY (LONG RANGE): 30 PARTS PER MILLION FOR ONE YEAR AND 50 PARTS PER MILLION FOR A 3 YEAR PERIOD.

B. OPERATING LIFE: 2000 HOURS MINIMUM AT FULL RATED WATTAGE.

C. STORAGE LIFE: 1 YEAR MINIMUM AT ROOM TEMPERATURE WITHOUT ELECTRICAL CHANGE.

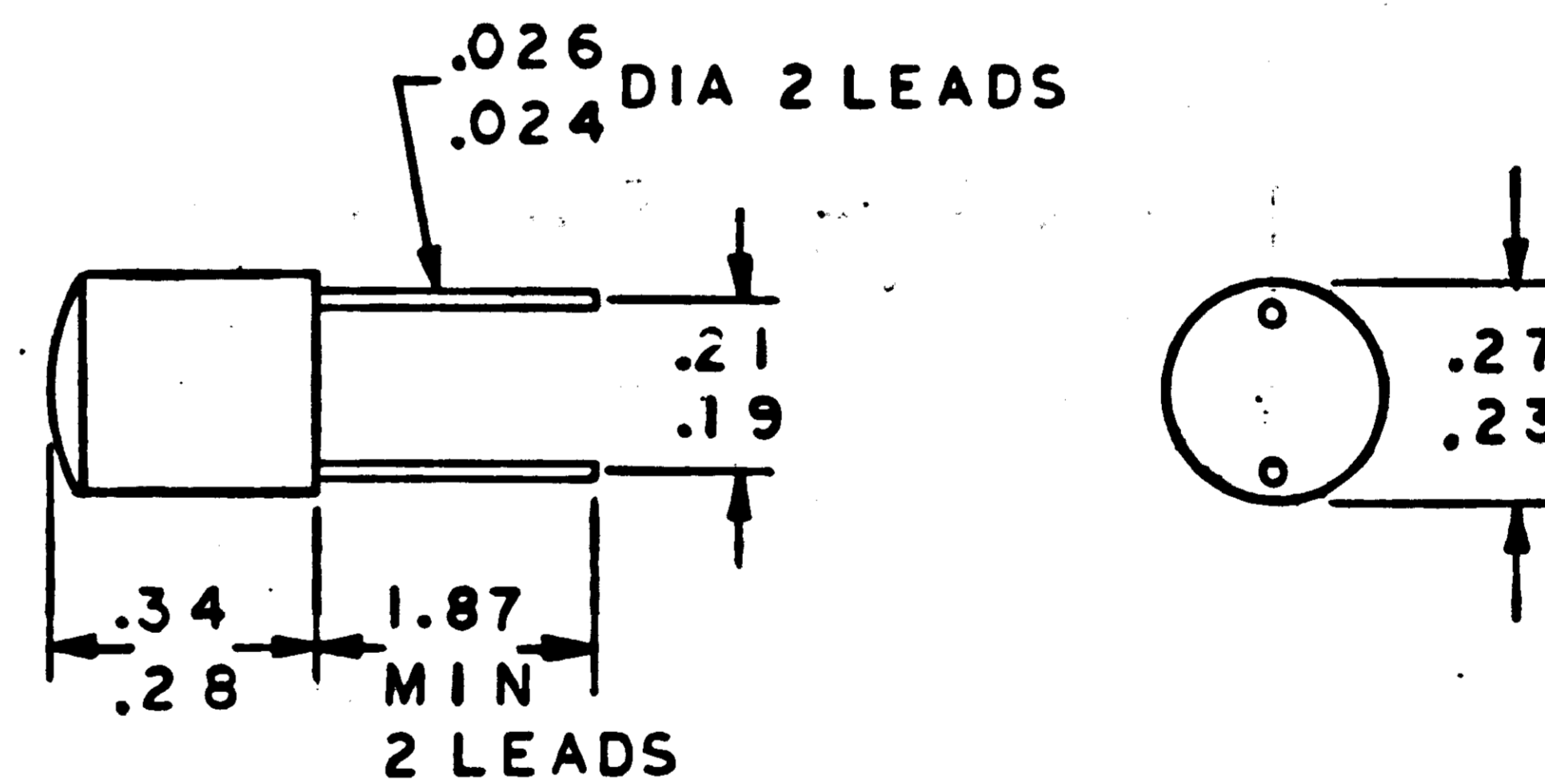
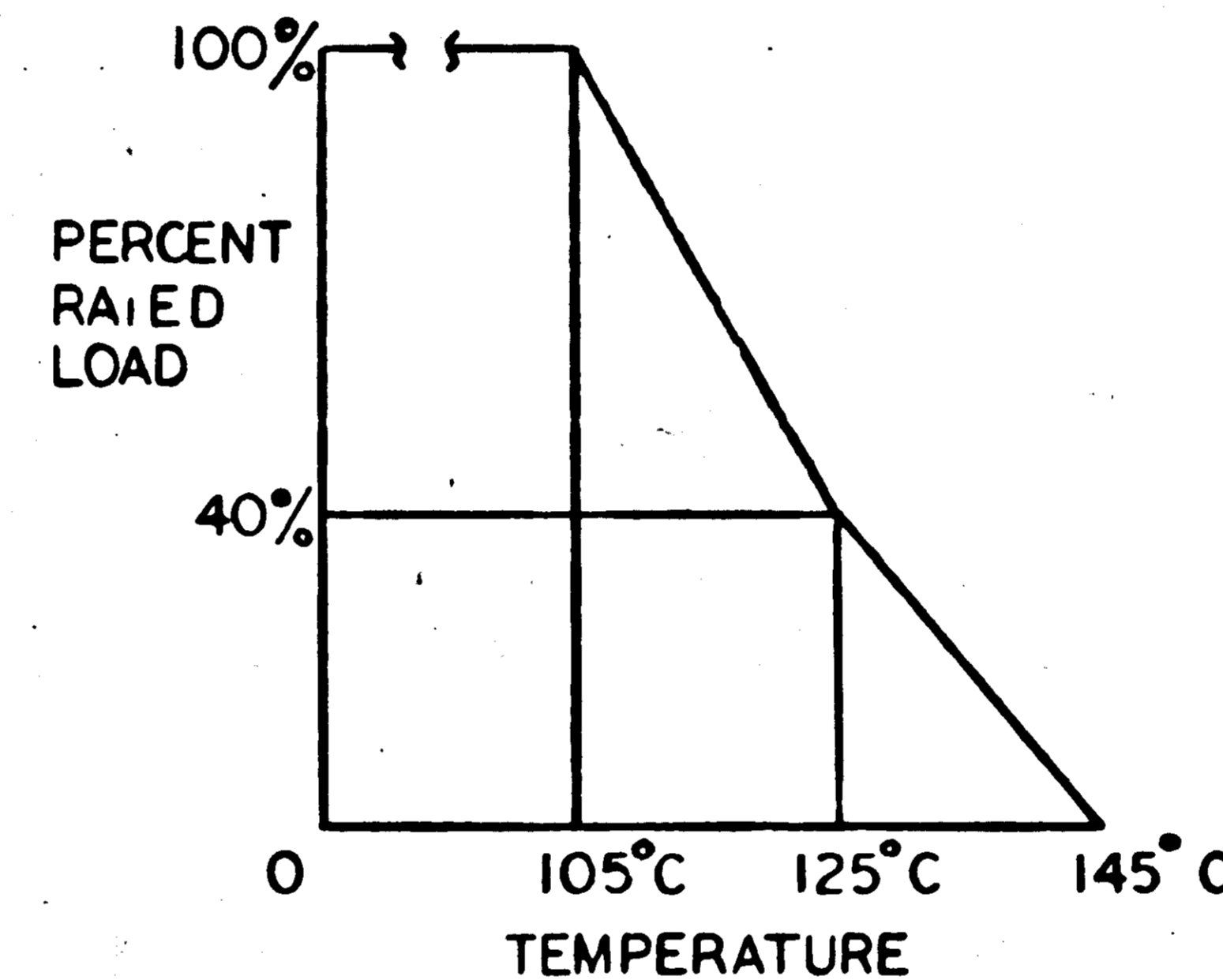
D. CONSTRUCTION: ENCAPSULATED, WIREWOUND RESISTANCE ELEMENT.

4. SPECIAL CONDITIONING:

A. TEMPERATURE CYCLING: ALL RESISTORS SHALL BE TEMPERATURE CYCLED IN ACCORDANCE WITH MIL-R-93, PARAGRAPH 4.6.4. ALL PARTS NOT MEETING PARAGRAPH 2.B.2 OF THIS SPECIFICATION AFTER TEST SHALL BE REJECTED.

B. BURN IN: ALL RESISTORS SHALL BE SUBJECTED TO A 24 HOUR FULL POWER BURN IN AT 105°C AMBIENT TEMPERATURE. THE CHANGE IN RESISTANCE SHALL NOT EXCEED 0.2%. DO NOT SAMP ANY PARTS WHICH ARE BEYOND PURCHASE TOLERANCE AT CONCLUSION OF TEST.

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



QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			
MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.		MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
DRAWN <i>[Signature]</i> DATE <i>[Date]</i>		RESISTOR, FIXED, WIREWOUND POSITIVE TEMP COEF SPECIFICATION CONTROL DRAWING	
CHECKED <i>[Signature]</i> DATE <i>[Date]</i>			
APPROVAL <i>[Signature]</i> DATE <i>[Date]</i>		CODE IDENT NO.	SIZE
NASA APPROVAL <i>[Signature]</i>		80230	C
MIT APPROVAL <i>[Signature]</i> DATE <i>[Date]</i>		SCALE NONE	WT
NEXT ASSY		USED ON	
APPLICATION		FINAL FINISH	
		NASA DRAWING NO. 1006714	
		SHEET 1 OF 1	

POSTED