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1006700

REVISIONS 03038			
SYM	DESCRIPTION	DATE	APPROVAL
-	INITIAL RELEASE CLASS A PER TDRR 03038	10/6/63	WHL
A	REVISED PER TDRR 04904	11/10/63	WHL

NOTES:

1. GENERAL REQUIREMENTS:

- A. INTERPRET DRAWING IN ACCORDANCE WITH THE STANDARDS PRESCRIBED BY MIL-D-70327.
- B. UNITS SHALL MEET THE GENERAL REQUIREMENTS OF MIL-S-19500.
- C. SUPPLIERS 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 1002054.
- E. PACKING AND PACKAGING: UNIT PACKING AND PACKAGING IN ACCORDANCE WITH LEVEL A OF MIL-S-19491.
- F. MARKING: UNIT PACKAGES AND EXTERIOR SHIPPING CONTAINERS SHALL BE MARKED PER MIL-STD-129 WITH THE MANUFACTURER'S NAME/OR SYMBOL AND TYPE DESIGNATION; THE NASA DRAWING NUMBER, DASH NUMBER AND REVISION LETTER SHALL ALSO BE INCLUDED. UNITS SHALL BE MARKED WITH THE MANUFACTURER'S SYMBOL/OR TYPE DESIGNATION WITH A BLACK BAND DENOTING CATHODE END.

TABLE I

DASH NO.	CAPACITANCE ± 1MC PICO FARADS ± 2% AT 4VDC ± .5V	CAPACITANCE RANGE PICO FARADS ± 1MC		DC WORKING VOLTS - MAX	QUALITY FACTOR AT 50 MC			I <sub>RR</sub> @: 80VDC AND 80°C NANOAMPS MAX
		AT 20VDC	AT 0.1VDC		AT 4VDC MINIMUM	AT 4VDC TYPICAL	AT MAX WV TYPICAL	
-1	47	≤ 25	≥ 106	20	7.0	15	32	10

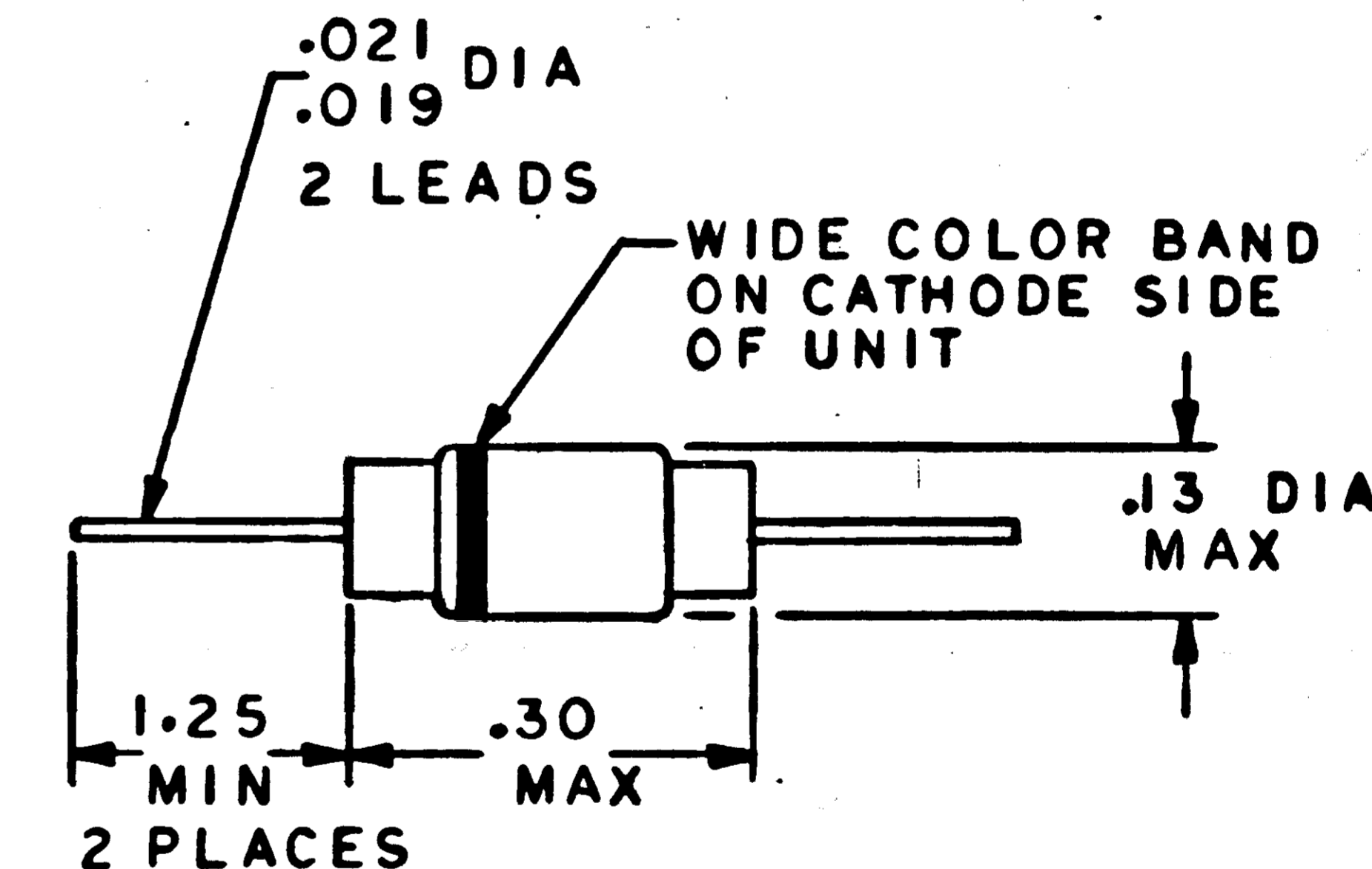
2. ACCEPTANCE AND INSPECTION REQUIREMENTS:

A. MECHANICAL PROPERTIES:

- (1) LEAD MATERIAL: SHALL BE IRON-NICKEL ALLOY PER ND PS 1015401; MATERIAL CERTIFICATION MUST ACCOMPANY EACH SHIPMENT.
- (2) LEAD BEND TEST: EACH LEAD SHALL BE CAPABLE OF WITHSTANDING A LEAD BEND TEST IN ACCORDANCE WITH MIL-STD-750, METHOD 2036, TEST CONDITION E. A WEIGHT OF 16 ± 1 OUNCES SHALL BE APPLIED TO EACH LEAD.  
LEAD PULL TEST: EACH LEAD SHALL BE CAPABLE OF WITHSTANDING A LEAD PULL TEST IN ACCORDANCE WITH MIL-STD-750, METHOD 2036, TEST CONDITION A WITH A STRAIGHT AXIAL PULL OF FOUR (4) POUNDS MINIMUM FOR ONE (1) MINUTE.  
NO MECHANICAL DAMAGE OR LACK OF PERFORMANCE SHALL BE EVIDENCED AFTER THESE TESTS.
- (3) REVERSE LEAKAGE CURRENT (I<sub>R</sub>) PER TABLE I.

3. DESIGN REQUIREMENTS:

- A. OPERATING LIFE: UNITS SHALL BE CAPABLE OF 2000 HOURS MINIMUM OPERATION WITHIN THE PRESCRIBED LIMITS.
- B. STORAGE LIFE: 1 YEAR MINIMUM AT ROOM TEMPERATURE WITHOUT ANY MECHANICAL OR ELECTRICAL DETERIORATION.
- C. CONSTRUCTION: HERMETICALLY SEALED. FUSED GLASS TO METAL AND WELDED METAL TO METAL SEALS.
- D. CAPACITANCE CHANGE VS. TEMPERATURE: CHANGE IN CAPACITANCE AT -2.0 VOLTS ± 5% FROM 0°C TO 80°C SHALL BE LESS THAN 5%.



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

MIL-STD-883C

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	MIT INSTRUMENTATION LAB CAMBRIDGE, MASS
TOLERANCES ON FRACTIONS DECIMALS ANGLES ± ± ±	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DO NOT SCALE THIS DRAWING	SEMICONDUCTOR DEVICE VOLTAGE VARIABLE CAPACITOR
MATERIAL SEE NOTES	SPECIFICATION CONTROL DRAWING
HEAT TREATMENT	NASA APPROVAL 9/14/63
FINAL FINISH	MIT APPROVAL 10/10/63
NEXT ASSY USED ON APPLICATION	

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			
MIT INSTRUMENTATION LAB CAMBRIDGE, MASS		MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
SEMICONDUCTOR DEVICE VOLTAGE VARIABLE CAPACITOR SPECIFICATION CONTROL DRAWING			
NASA APPROVAL	CODE IDENT NO.	SIZE	NASA DRAWING NO.
MIT APPROVAL		C	1006700
SCALE NONE		WT	SHEET   OF

