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NOTES:

1. REQUIREMENTS:

- A. ENCAPSULATION: GLASS. UNITS SHALL BE HERMETICALLY SEALED.
- B. LEAD MATERIAL SHALL BE IRON-NICKEL ALLOY, COPPER CLAD, GOLD PLATED IN ACCORDANCE WITH NDPS 1015401. A CERTIFICATE OF COMPLIANCE WITH THIS REQUIREMENT SHALL ACCOMPANY EACH SHIPMENT.
- C. SHALL WITHSTAND A THERMAL SHOCK OF 300°C FROM 0°C WITHIN 30 SECONDS AND BE RETURNED TO ROOM AMBIENT WITHOUT AFFECTING OPERATING CHARACTERISTICS AS SPECIFIED HEREIN, IN ADDITION TO THE REQUIREMENTS OF ND 1002000.
- D. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS OF ND1015404 SECTION II.
- E. UNITS SHALL BE 100 PERCENT INSPECTED FOR COMPLIANCE WITH THE REQUIREMENTS IN TABLE I UNLESS OTHERWISE SPECIFIED.
- F. TRANSIENT RESPONSE: USING A TECHTRONIX TYPE S PLUG-IN UNIT AND $I_F = 5$ MILLIAMPERES AND $I_R = 100$ MICROAMPERES, THE MEASURED TIME MUST BE LESS THAN .5 MICROSECOND. THE SLOPE OF THAT PORTION OF THE DISCHARGE CURVE CORRESPONDING TO LINEAR CAPACITANCE SHALL BE GREATER THAN .5 VOLTS AND .2 MICROSECOND.
- G. LEAD TESTS: EACH LEAD SHALL BE CAPABLE OF WITHSTANDING THE FOLLOWING TESTS:
- (1) LEAD BEND TEST: WITH THE COMPONENT BODY HELD IN A VERTICAL POSITION AND A ONE POUND WEIGHT SUSPENDED IN AN AXIAL DIRECTION FROM THE LEAD UNDER TEST, 2 CYCLES OF BENDS SHALL BE ACCOMPLISHED. ONE CYCLE OF BENDS SHALL CONSIST OF MOVING THE BODY OF THE UNIT IN THE SAME PLANE THROUGH 90 DEGREES IN ONE DIRECTION THEN BACK 180 DEGREES IN THE OPPOSITE DIRECTION AND BACK 90 DEGREES TO THE ORIGINAL POSITION. NO MECHANICAL DAMAGE OR LACK OF PERFORMANCE SHALL BE EVIDENCED AFTER THE TEST.
- (2) LEAD PULL TEST: EACH LEAD SHALL WITHSTAND AN AXIAL PULL OF 4 POUNDS MINIMUM. NO MECHANICAL DAMAGE OR LACK OF PERFORMANCE SHALL BE EVIDENCED AFTER THE TEST.
- H. EACH DIODE SHALL BE MICROSCOPICALLY INSPECTED, BEFORE PAINTING, UNDER 10X MAGNIFICATION, FOR FOREIGN PARTICLES, TIPPED DICE, INCOMPLETE SEALING, AND REDUCTION OF LEAD DIAMETER AT POINT OF FUSING.
- I. PREPARATION FOR DELIVERY: IN ACCORDANCE WITH MIL-S-19491 LEVEL C PRESERVATION AND PACKAGING AND LEVEL C PACKING. MARKING OF UNIT PACKAGES AND EXTERIOR SHIPPING CONTAINERS SHALL INCLUDE THE NASA DRAWING NUMBER AND REVISION LETTER.

2. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

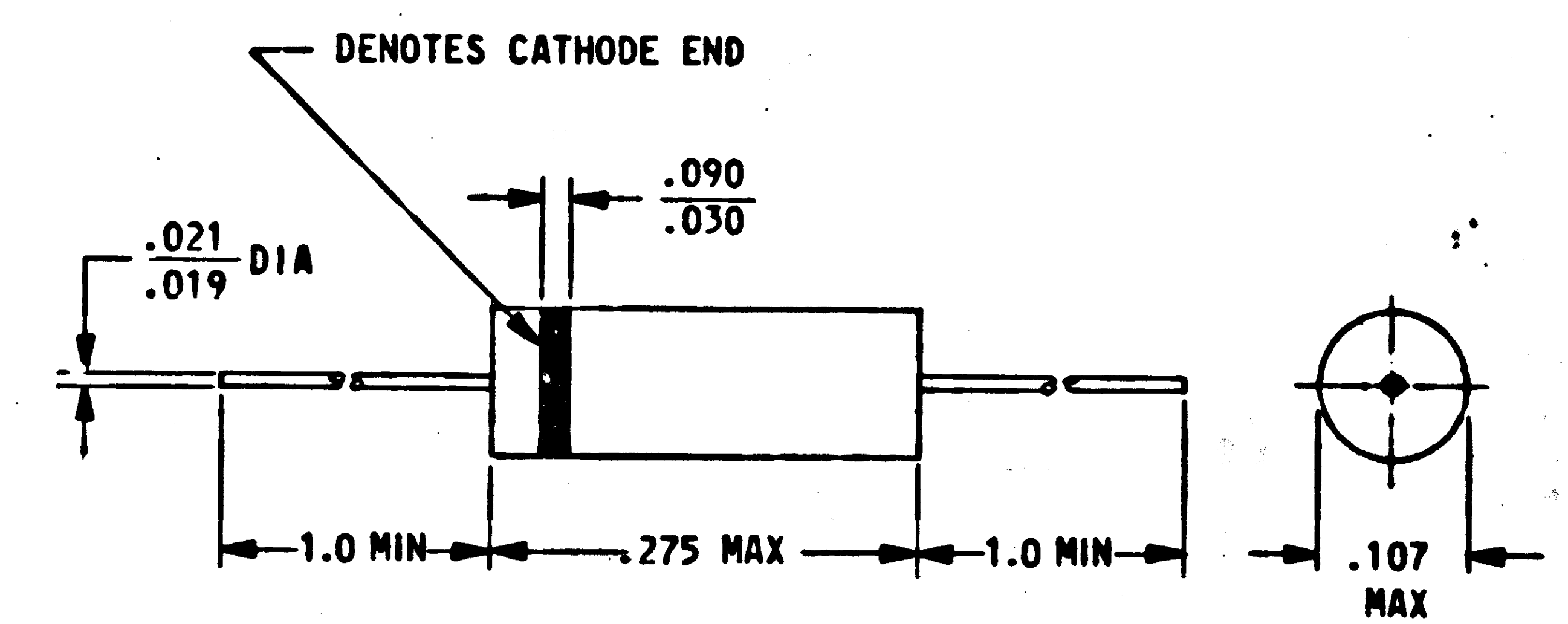
PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND1002034 FOR THIS DRAWING

E 15006751

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
C	REPLACES REV B WITH CHANGE PER TDRR 00513		WLD
D	REVISED PER TDRR 01274	5-15-63	WLD
E	REPLACED BY REV F WITH CHANGES PER TDRR 02006	7/17/63	JH

FOR INFORMATION ONLY

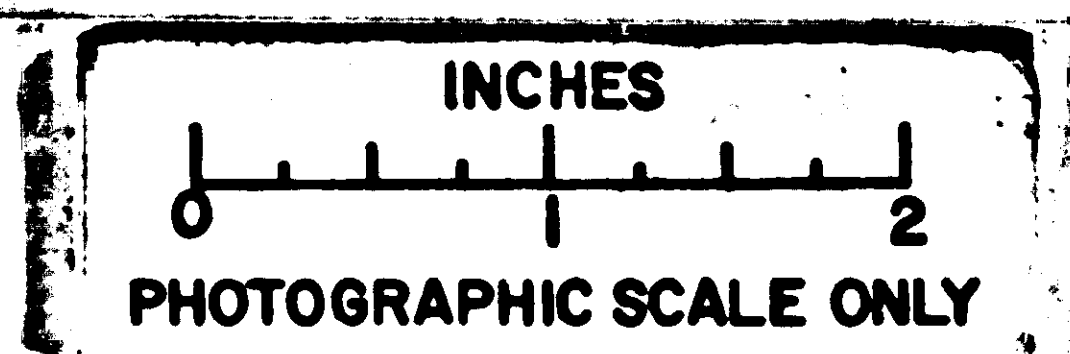
CLASS B RELEASE TDR No. 00165 DATE 12-12-62



E REPLACED BY REV F WITH CHANGE
C REPLACES REV B WITH CHANGE

E	E
D	—
C	—
REV—A	REV—
SHEET 1	SHEET 2
REVISION STATUS OF SHEETS	

QTY REQ		PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS				
MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.		MANNED SPACECRAFT CENTER HOUSTON, TEXAS		
DRAWN Ray Wheeler DATE 2/9/62 CHECKED J. Maynard 27 Nov 62 APPROVAL E.C. Hall 11 Dec 62		SEMICONDUCTOR DEVICE, DIODE		
DO NOT SCALE THIS DRAWING MATERIAL		SPECIFICATION CONTROL DRAWING		
SEE NOTE 1		CODE IDENT NO. SIZE NASA DRAWING NO.		
HEAT TREATMENT NONE		C 1006751		
FINAL FINISH NONE		SCALE NONE WT SHEET 1 OF 2		
NEXT ASSY USED ON APPLICATION				



2		1															
3	1006751	<table border="1"> <thead> <tr> <th colspan="4">REVISIONS</th> </tr> <tr> <th>SYM</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPROVAL</th> </tr> </thead> <tbody> <tr> <td>E</td> <td>REPLACED BY REV F WITH CHANGES PER IDRR 02006</td> <td>7/17/63</td> <td>lt</td> </tr> </tbody> </table>				REVISIONS				SYM	DESCRIPTION	DATE	APPROVAL	E	REPLACED BY REV F WITH CHANGES PER IDRR 02006	7/17/63	lt
REVISIONS																	
SYM	DESCRIPTION	DATE	APPROVAL														
E	REPLACED BY REV F WITH CHANGES PER IDRR 02006	7/17/63	lt														

INSPECTION REQUIREMENTS						
TEST CONDITIONS: AT EXISTING LOCAL ATMOSPHERIC PRESSURE AND 25°C ± 3°C						
PARAMETER	SYMBOL	CONDITIONS	LIMITS		UNIT	AQL (%) OF LTPD (%)
			MIN	MAX		
VISUAL AND DIMENSIONAL INSPECTION						0 SEE NOTE 1F
LEAD BEND		SEE NOTE G(1)				
LEAD PULL		SEE NOTE G(2)	4		LB	
INVERSE CURRENT	I_R	$V_R = 15$ VOLTS MIN		10	MA	
REVERSE BREAKDOWN VOLTAGE	V_R	$I_R = 100$ UA MAX	30		V	
FORWARD SURGE CURRENT	I_F	1 SEC MIN REPETATIVE DUTY CYCLE 1%		2	A	
FORWARD VOLTAGE DROP (PEAK)	V_F	$I_F = 40$ MA	.75	.85	V	
FORWARD VOLTAGE DROP (PEAK)	V_F	$I_F = 400$ MA		1.25	V	

CLASS B RELEASE TDR No. 00165 DATE 12/12/62

~~E REPLACED BY REV F WITH CHANGE~~

QTY REQD		PART OR IDENTIFYING NO.		NOMENCLATURE OR DESCRIPTION		FIN NO.	
LIST OF MATERIALS							
		MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.		MANNED SPACECRAFT CENTER HOUSTON, TEXAS			
		DWS. NO. CONTRACT		SEMICONDUCTOR DEVICE, DIODE SPECIFICATION CONTROL DRAWING			
		DRAWN <u>Ray. Wheeler</u> DATE <u>2/9/62</u>					
		CHECKED <u>L. Maynard</u> <u>2/24/62</u>					
		APPROVAL _____					
		APPROVAL _____					
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS DECIMALS ANGLES \pm \pm \pm DO NOT SCALE THIS DRAWING MATERIAL <u>—H—</u>					
		HEAT TREATMENT <u>—H—</u>					
NEXT ASSY		USED ON		NASA APPROVAL <u>W. J. R. Price</u> <u>12-12-62</u>		CODE IDENT NO.	SIZE
		FINAL FINISH <u>—H—</u>		MIT APPROVAL <u>W. J. R. Price</u> <u>12/14/62</u>			C
APPLICATION						SCALE	WT
						NASA DRAWING NO. 1006751	
						SHEET 2 OF 2	

INCHES

0 2

PHOTOGRAPHIC SCALE ONLY