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REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 00101	11/21/62	WIL
B	REVISED PER TDRR 00286	1-23-63	WIL
C	ADDED PROCUREMENT NOTE 4 PER TDRR 00433	2-20-63	WIL
D	REPLACED WITH CHANGE BY REV E PER TDRR 00513		WIL

NOTES:

1. REQUIREMENTS:

- A. THIS DEVICE SHALL MEET THE MATERIAL AND WORKMANSHIP REQUIREMENTS OF MIL-S-19500.
- B. LEAD MATERIAL SHALL BE IN ACCORDANCE WITH NASA DOCUMENT PS 1015402 EXCEPT LEAD DIAMETERS SHALL BE AS FOLLOWS:
  - (1) THE LEAD DIAMETER IN THE ZONE BETWEEN .050 AND .250 FROM THE BASE SEAT SHALL BE .016 PLUS .003 MINUS .000; IN THE ZONE BETWEEN .250 AND 1.5 FROM THE BASE SEAT SHALL BE .021 MAX, AND IN ALL OTHER ZONES SHALL BE UNCONTROLLED.
- C. UNITS SHALL BE HERMETICALLY SEALED IN A METAL CASE.
- D. UNITS SHALL MEET THE TEST REQUIREMENTS AS SPECIFIED IN ND 1002012.
- E. QUALITY ASSURANCE PROVISIONS SHALL BE IN ACCORDANCE WITH NASA DOCUMENT ND 1015404 SECTION I.
- F. PREPARATION FOR DELIVERY SHALL BE IN ACCORDANCE WITH MIL-S-19491.

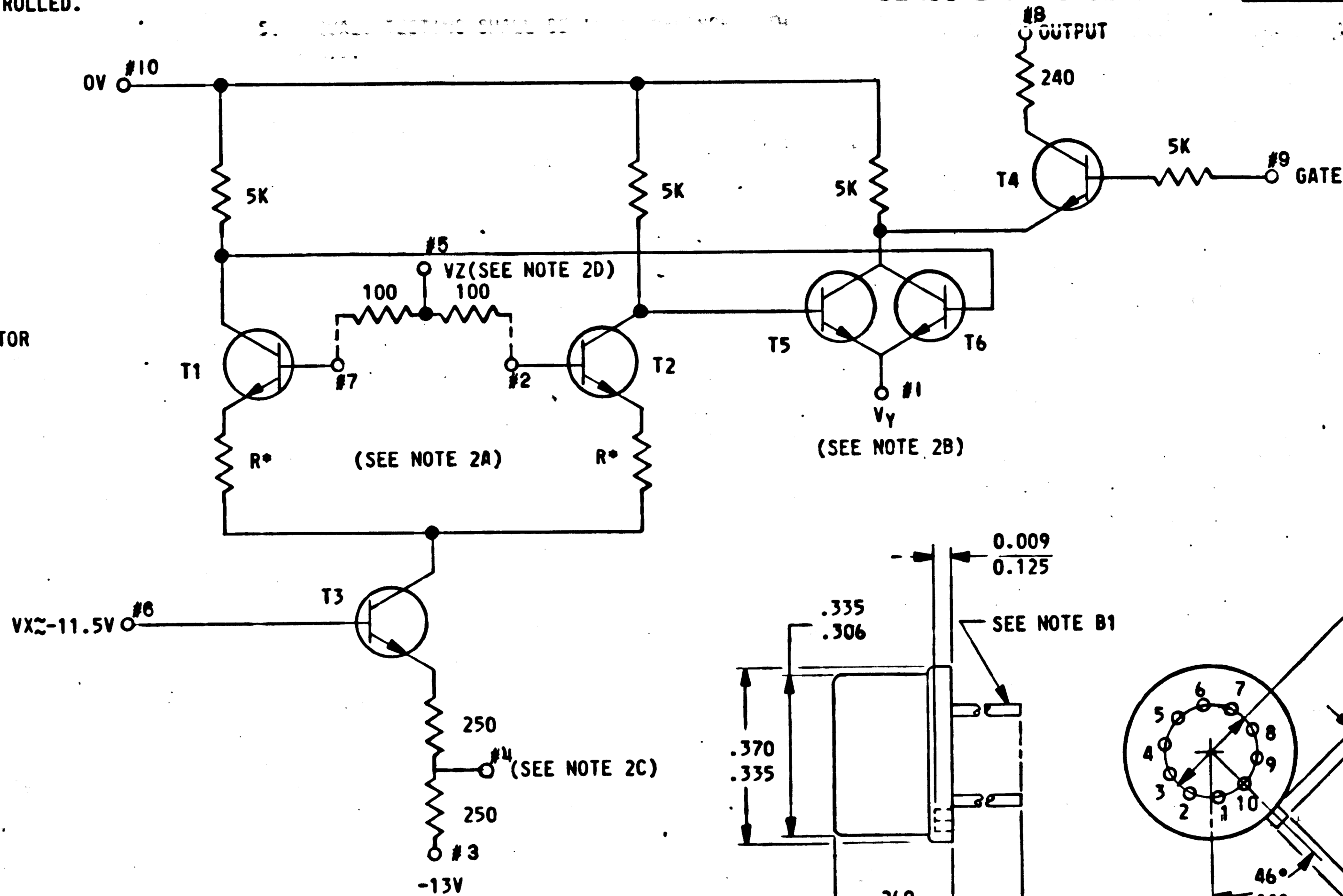
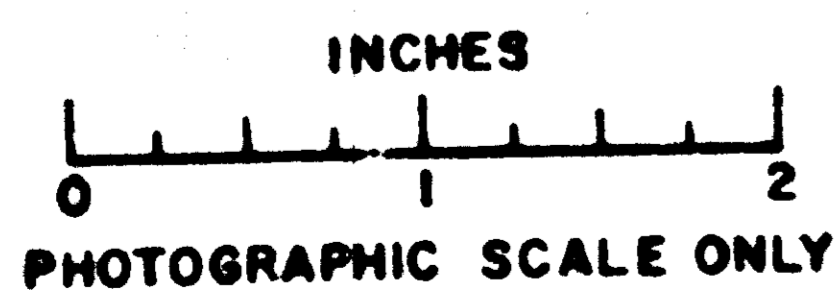
2. EXPLANATORY NOTES FOR SCHEMATIC:

- A.  $R^*$  IS THE EMITTER DEGENERATION REQUIRED TO BALANCE THE D.C. COLLECTOR VOLTAGES OF  $T_1$  AND  $T_2$  AND TO GET THE REQUIRED DIFFERENTIAL GAIN.
- B.  $V_Y$  IS ADJUSTABLE TO SET SENSING THRESHOLD.  $-6V \leq V_Y \leq -4V$
- C. AN EXTERNAL RESISTOR MIGHT BE ADDED AT THIS POINT TO MATCH SENSE AMPLIFIERS IF ANALYSIS SHOWS IT TO BE NECESSARY.
- D. VZ AND ITS ACCOMPANYING 100  $\Omega$  RESISTORS MAY NOT BE USED ON SOME SENSE AMPLIFIERS. WHEN THEY ARE SPECIFIED TO BE USED THEY WILL BE CONNECTED AS SHOWN BY THE DOTTED LINES.

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

- A. WAIVE AS REQUIRED ALL INFORMATION PRESENTED ON THIS DRAWING EXCEPT LEAD MATERIAL SPEC & PHYSICAL DIMENSIONS.
- B. UPON SPECIFIC INSTRUCTION BY (TD) TECHNICAL DIRECTIVE PROCURE THIS PART AS CHANGE LETTER C BY ORDERING TO VENDOR CATALOG NO. & SPECIFICATIONS. REFERENCE ND 1002034.
- C. DISREGARD THIS NOTE IN ITS ENTIRETY IF REFERENCE IS MADE TO THIS DRAWING BY OTHER THAN REVISION LETTER C.

FOR SOURCE OF SUPPLY  
SEE QUALIFIED VENDOR LIST  
ND 1002034



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00085 DATE 11-8-62

REPLACED WITH CHANGE BY REV E

MASTER

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>Ray Wheeler</i> DATE 5/21/62 CHECKED <i>H. H. ...</i> 6/10/62 APPROVAL <i>Edna C. Hall</i> 7/10/62		<b>SEMICONDUCTOR DEVICE, SENSE AMPLIFIER</b> SPECIFICATION CONTROL DRAWING	
NASA APPROVAL <i>W. J. ...</i> 11-8-62		CODE IDENT NO. SIZE <b>C</b>	NASA DRAWING NO. <b>1006769</b>
MIT APPROVAL <i>W. J. ...</i> 11/8/62		SCALE NONE WT	SHEET 1 OF 1

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