

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 CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

D 1006771

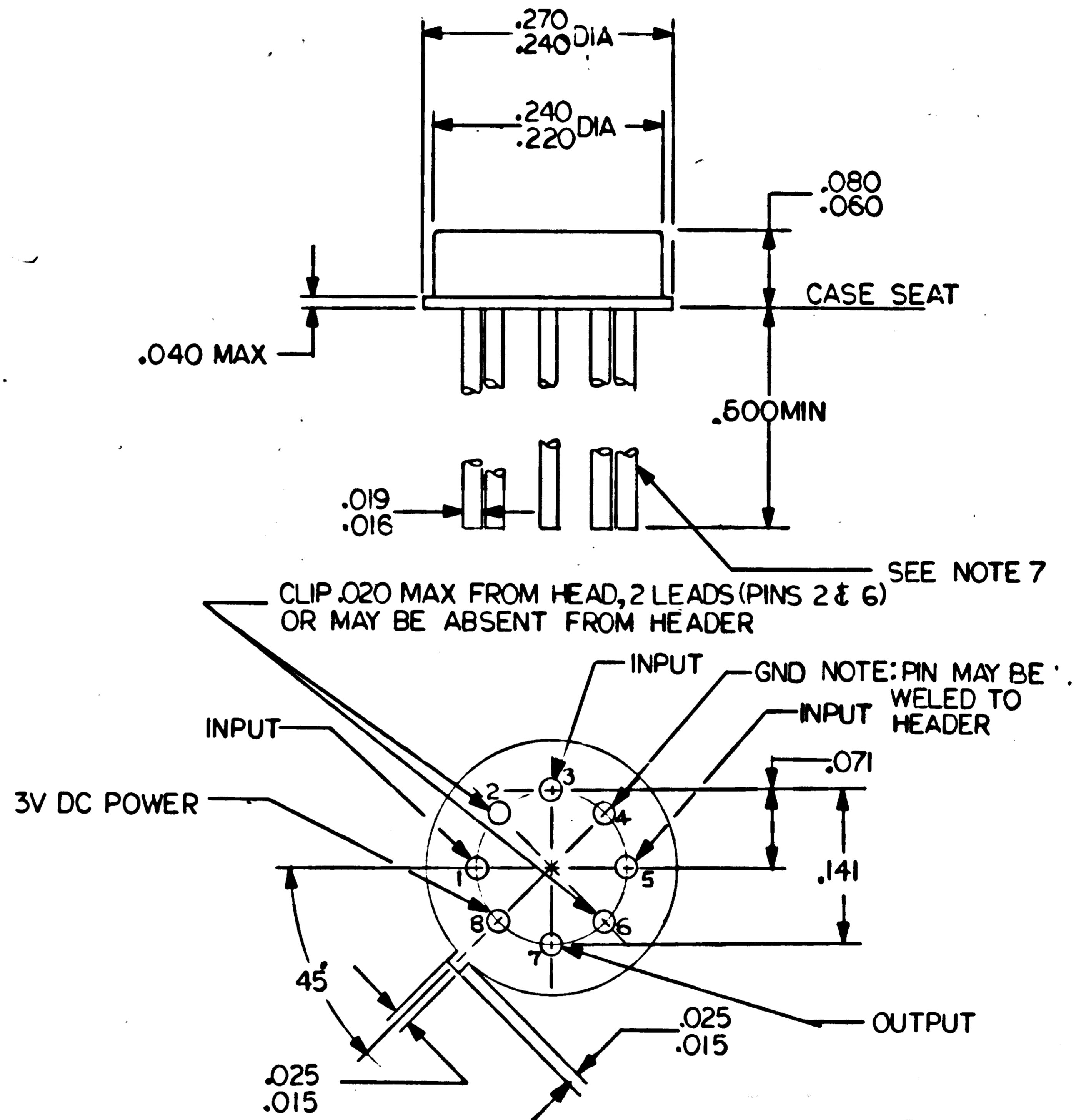
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
	TAKEN FROM DRAWING C-98794-B	7-19-62	
A	REVISED PER TDRR 00064	10-5-62	
B	REVISED PER TDRR 00081	10-23-62	
C	REVISED & REDRAWN PER TDRR 00190	12-20-62	WK
D	ADDED PROCUREMENT NOTE 12 PER TDRR 00445	2-20-63	WK

GENERAL REQUIREMENTS:

- UNITS SHALL MEET THE GENERAL REQUIREMENTS OF MIL-S-19500 FOR MATERIALS, QUALITY & WORKMANSHIP.
- THE SPECIFIED LEAD DIAMETER APPLIES TO THE ZONE BETWEEN .050 AND .250 FROM THE CASE SEAT. BETWEEN .250 AND THE END OF LEAD A MAXIMUM OF .021 IS HELD. OUTSIDE OF THESE ZONES THE LEAD DIAMETER IS NOT CONTROLLED.
- MAXIMUM DIAMETER LEADS AT A GAGING PLANE .054 ± .001 BELOW CASE SEAT TO BE WITHIN .007 OF THEIR TRUE LOCATION RELATIVE TO MAX. WIDTH TAB AND TO THE MAXIMUM .270 DIAMETER MEASURED WITH A SUITABLE GAGE. WHEN GAGE IS NOT USED, MEASUREMENT WILL BE MADE AT SEATING PLANE.
- INDEX TAB FOR VISUAL ORIENTATION ONLY.
- MEASURED FROM MAX. DIAMETER OF THE ACTUAL DEVICE.
- LEAD MATERIAL: GOLD PLATED IRON-NICKEL-COBALT-ALLOY IN ACCORDANCE WITH ND1015402.
- PIN 4 ELECTRICALLY CONNECTED TO CASE.
- D C RESISTANCE BETWEEN PIN 7 & 8 SHALL BE 530 OHMS MIN.
- AVERAGE PROPAGATION DELAY SHALL BE 35 NANoseconds MAX. AND SHALL BE MEASURED AS ILLUSTRATED ON SHEET 2.
- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
- UNIT SHALL BE ELECTRICALLY TESTED IN ACCORDANCE WITH TABLE I.

- 12
- 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 D 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 D.

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



BOTTOM VIEW
FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00027 DATE 9/1/62

REV D	REV D
REV C	REV C
REV B	---
REV A	---
SHEET 1	SHEET 2
REVISION STATUS OF SHEETS	

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 12-19-62		MICRO NOR GATE (TO 47 SIZE) SPECIFICATION CONTROL DWG.	
CHECKED <i>[Signature]</i> DATE 20 Dec 62			
APPROVAL <i>[Signature]</i> DATE 20 Dec 62			
NASA APPROVAL <i>[Signature]</i> DATE 2-20-62		CODE IDENT NO.	NASA DRAWING NO.
MIT APPROVAL <i>[Signature]</i> DATE 20 Dec 62		C	1006771
SCALE	WT	SHEET	OF
---	---	1	2

TOLERANCES ON		
FRACTIONS	DECIMALS	ANGLES
±	±	±
DO NOT SCALE THIS DRAWING		
MATERIAL		
HEAT TREATMENT		
FINAL FINISH		
NEXT ASSY	USED ON	APPLICATION

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 CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

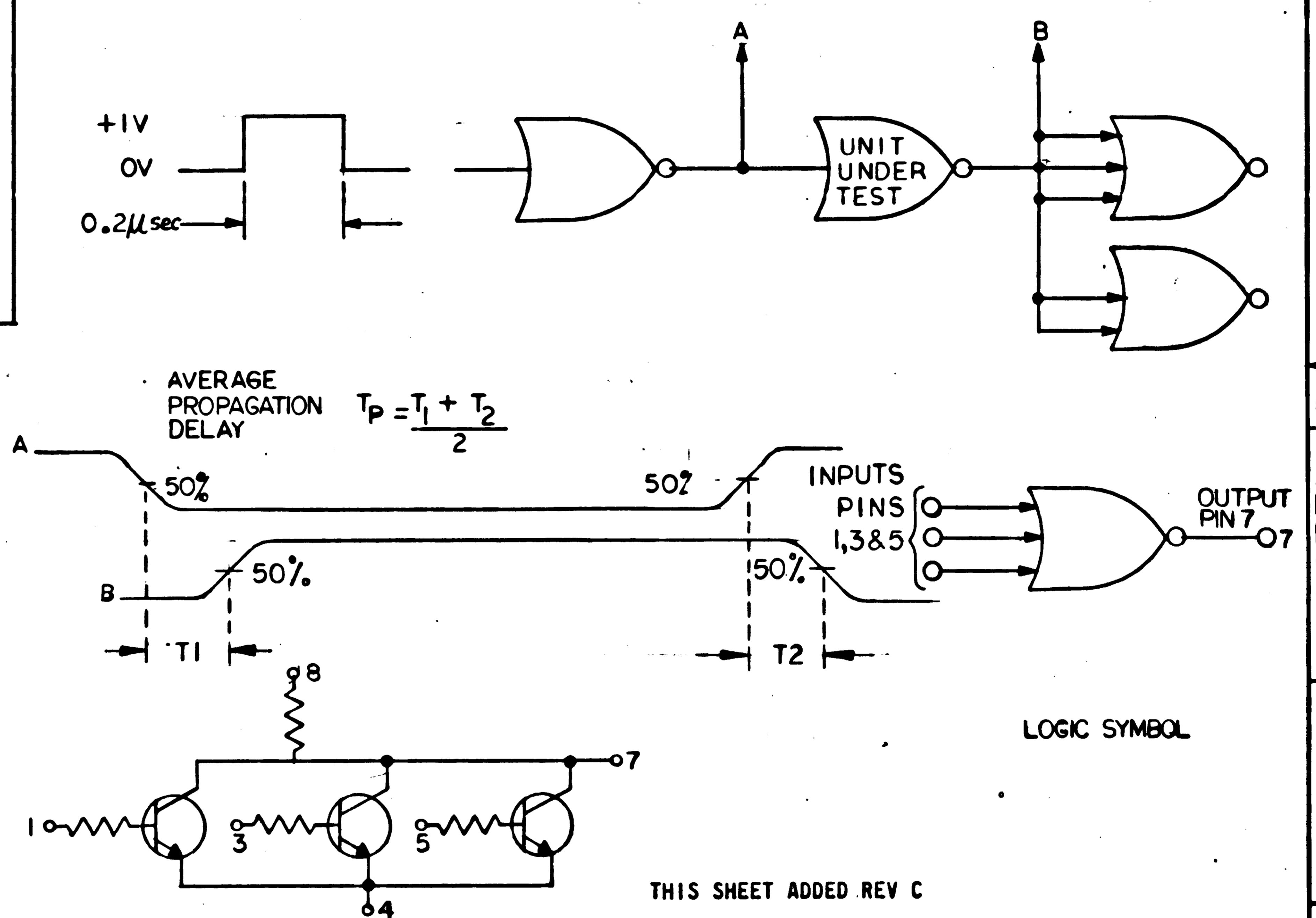
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
C	REVISED & REDRAWN PER TDRR SHEET 2 ADDED 00190	10-28-62	WK
D	REVISED PER TDRR 00445	2-20-63	ECB WK

PARAMETER	CONDITIONS AT PINS						MIN	MAX
	1	3	4	5	7	8		
BASE CURRENT I ₁	785±2MV	785±10MV	GND	785±10MV		+3.0V		.350 ma
BASE CURRENT I ₂	785±10MV	785±2MV		785±10MV				.350 ma
BASE CURRENT I ₃	785±10MV	785±10MV		785±2MV				.350 ma
OUTPUT VOLTAGE PIN 7	785±2MV	OPEN		OPEN	V _o			.350V
OUTPUT VOLTAGE PIN 7	OPEN	785±2MV		OPEN	V _o			.350V
OUTPUT VOLTAGE PIN 7	OPEN	OPEN		785±2MV	V _o			.350V
OUTPUT CURRENT AT PIN 7	540±2MV	540±2MV		540±2MV	785MV		3.00 ma	
SATURATION VOLTAGE	1.20V±10MV	OPEN		OPEN	V _s			.300V
SATURATION VOLTAGE	OPEN	1.20V±10MV		OPEN	V _s			.300V
SATURATION VOLTAGE	OPEN	OPEN	1.20V±10MV	OPEN	V _s	+3.0V		.300V
LEAKAGE CURRENT I _{CEO}	OPEN	OPEN	GND	OPEN	5.0V	OPEN		100 MICRO AMPS
EMITTER BASE REVERSE CURRENT I _{EBO}	GND	GND	5.0V	GND	OPEN	OPEN		1 ma
COLLECTOR CUTOFF CURRENT I _{CBO}	GND	GND	OPEN	GND	8.0V	OPEN		1 ma

MAXIMUM VOLTAGE TO PIN 8	+8.0 VOLTS
MAXIMUM VOLTAGE APPLIED TO ANY INPUT PIN	±4.0 VOLTS
STORAGE TEMPERATURE	-65°C TO + 200°C
OPERATING TEMPERATURE	0 TO 70°C
FAN OUT OF 5 WITH FAN IN OF 3	0 TO 70°C
NOMINAL DISSIPATED POWER PER UNIT	15 MW

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00027 DATE 9/12/62



THIS SHEET ADDED REV C

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FINO.
LIST OF MATERIALS			
MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.		MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
DRAWN <i>[Signature]</i> DATE 12-19-62		MICRO-NOR GATE (TO 47 SIZE)	
CHECKED <i>[Signature]</i> DATE 20 Dec 62			
APPROVAL <i>[Signature]</i> DATE 12-20-62		SPECIFICATION CONTROL DRAWING	
APPROVAL <i>[Signature]</i> DATE 20 Dec 62			
HEAT TREATMENT <i>[Signature]</i>		CODE IDENT NO.	NASA DRAWING NO.
FINAL FINISH <i>[Signature]</i>		C	1006771
NEXT ASSY	USED ON	SCALE NONE	SHEET 2 OF 2
APPLICATION		WT	

MASTER