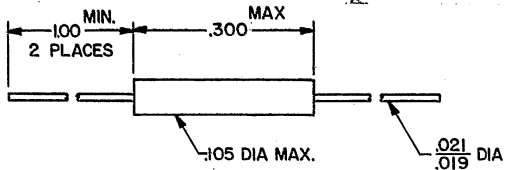


ST. PAUL MILITARY DRAWING

4907828



REVISIONS

SYM	EIR	DESCRIPTION	DATE	COMP ENG	QUAL	STD
E	A53360	REDRAWN AND RETYPED, ELECTRICAL ITEMS 1, 2, 7, 8, 11, 12, 13, 16 18 REVISED	4-19-63	R. I. I.		
F	B61609	REVISED MARKING AND PACKAGING ADDED DS142	11-3-64	B.B.		
G	B64581	REVISED AVL	1-25-65	B.B.		
H	B70450	ADDED INSPECTION LOT SIZE TO Q.A. PROVISIONS	10-8-65	W.S.M.		
J	B79176	REVISED AVL, TABLE 1 GROUP B	9-16-66	W.N.E.		
K	B72160	REVISED AVL	11/4/66	W.N.E.		
L	B20655	INACTIVATED DRAWING	1/24/69	W.L.B.		

SCOPE: THIS DRAWING COVERS THE DETAIL REQUIREMENTS FOR A SUBMINIATURE, GLASS GERMANIUM, SWITCHING DIODE

APPLICABLE DOCUMENTS: THE FOLLOWING DOCUMENTS OF THE ISSUE IN EFFECT ON THE DATE OF INVITATION FOR BIDS, FORM A PART OF THIS DRAWING.

- SB103-----COMPONENT ACCEPTANCE TESTING AND STORAGE
- SB102-----SEMICONDUCTOR DIODES, GENERAL SPECIFICATION FOR
- MIL-STD-105-----SAMPLING PROCEDURES AND TABLES FOR INSPECTION BY ATTRIBUTES
- DS142-----REEL PACKAGING OF AXIAL LEAD COMPONENTS, DETAIL SPECIFICATION FOR

REQUIREMENTS: THE REQUIREMENTS SHALL BE IN ACCORDANCE WITH SB102 AND AS SPECIFIED HEREIN:

MECHANICAL:
TERMINALS: DUMET, TINNED

CASE: GLASS, HERMETICALLY SEALED
BODY COLOR: BLUE
MARKINGS, MINIMUM: JEDEC PART NUMBER (1N3592), MANUFACTURER'S IDENTIFICATION AND ACCEPTANCE DATE CODE ALL TYPOGRAPHICALLY INDICATED. A CONTINUOUS COLOR BAND SHALL BE USED TO DESIGNATE THE CATHODE END. MARKING TO BE OF A CONTRASTING COLOR.

25°C ±1.5°C AMBIENT		°C	
MIN	MAX	MIN	MAX
(18) t _{rr} TEKTRONIX TYPE "SM" DIODE RECOVERY UNIT AND TYPE 541 SCOPE			
I _f = 2.0 MA, I _r = -0.2 MA, RECOVERY TO 0 V			
40 NS			

QUALITY ASSURANCE PROVISIONS: SAMPLING AND INSPECTION: SAMPLING AND INSPECTION SHALL BE IN ACCORDANCE WITH SB 102, SB 103 AND AS SPECIFIED HEREIN. THE MAXIMUM INSPECTION LOT SIZE SHALL BE 250,000 COMPONENTS.

TABLE I

INSPECTION OR TEST	ITEM	INSPECTION OR TEST	ITEM	INSPECTION OR TEST	ITEM
GROUP A		GROUP B		GROUP D	
SUBGROUP I		SHOCK & CENTRIFUGE		HERMETIC SEAL	
DESIGN AND CONSTRUCTION		I _r	12a	I _r	12a
		I _r	12b	I _r	12b
SUBGROUP II		V _f	13a	V _f	13a
BV	11				
I _r	12a	GROUP C		INSPECTION LEVEL AND AQL % DEFECTIVE PER MIL-STD-105	
I _r	12b	OPERATING LIFE (V _r = -20V MIN @ 70°C MIN)		GROUP A	II
V _f	13a			SUBGROUP I	.65
V _f	13b			SUBGROUP II	.65
				SUBGROUP III	.65
SUBGROUP III	17	I _r	PE12a	GROUP B	II 1.0
C _s	18	V _f	PE12b	GROUP C	L8 1.0
t _{rr}			PE13a	GROUP D	L8 1.0

ELECTRICAL: ABSOLUTE MAXIMUM RATINGS

25°C ±1.5°C AMBIENT		°C	
MIN	MAX	MIN	MAX
-25V			
70 MA			
80 MW			

- BV _____
- I_r (DC) _____
- i_f (PULSE) _____ USEC % DUTY CYCLE _____
- i_f (SURGE) FOR _____ SEC _____
- I_o (AVERAGE RECTIFIED) _____
- TOTAL DIODE DISSIPATION:
 - FREE AIR, DERATE BY 1.07 mW/°C
 - INF. HEAT SINK, DERATE BY _____ mW/°C
 -
 -
- STORAGE TEMPERATURE -55°C TO 100°C
- OPERATING JCT. TEMPERATURE -55°C TO 100°C
-
-

CHARACTERISTICS:

	25°C ±1.5°C AMBIENT			°C	
	MIN	MAX		MIN	MAX
11) BV @ I _r			PE11		
12) I _r (a) V _r -4.5V		-4 UA	PE12		-8 UA
(b) V _r -20V		-20UA			-40 UA
(c) V _r -25V		-100UA			
13) V _f (a) I _f 2 MA		0.35 V	PE13		0.38 V
(b) I _f 15 MA		0.50 V			
14) V _f (PLATEAU) @ I _f			PE14		
15) V _f (PEAK) @ I _f			PE15		
16) t _{fr} @ I _f V _r			PE16		
to V _f					
17) C _s @ V _r -3V		f 1 MC			1 pf
V _{ac} .02V					

PULSE TEST CONDITIONS:

- PW _____ USEC
- t_{ri} _____ USEC
- PRR _____ KC
- TOTAL SERIES RESISTANCE _____ OHMS
- CURRENT PULSE AMPLITUDE _____ MA
- SCOPE: MODEL _____
- PROBE: MODEL _____

PACKAGING: PACKAGING SHALL BE IN ACCORDANCE WITH DS142.
SOURCE(S) OF SUPPLY

ONLY THE ITEM(S) LISTED ON THIS DRAWING WHEN PROCURED FROM THE VENDOR(S) LISTED HEREON IS APPROVED BY UNIVAC FEDERAL SYSTEMS DIVISION FOR USE IN UNIVAC DESIGNED EQUIPMENT. A SUBSTITUTE ITEM SHALL NOT BE USED WITHOUT PRIOR TESTING AND APPROVAL BY UNIVAC FEDERAL SYSTEMS DIVISION OR BY THE COGNIZANT PROCURING ACTIVITY.

NATIONAL TRANSISTOR MFG. INC.
LAWRENCE, MASSACHUSETTS
PART NUMBER: 1N3592
GENERAL INSTRUMENT CORP. (15281)
SEMICONDUCTOR DIV.
WOONSOCKET, RHODE ISLAND
PART NUMBER: 1N3592
NUCLEONIC PRODUCTS CO., INC. (08257)
LOS ANGELES, CALIFORNIA
PART NUMBER: 1N3592

INACTIVE
FOR NEW DESIGN
AFTER 12-22-68

COMPONENT ENGINEER	DATE	CLASS	Remington Rand Univac DIVISION OF SPERRY RAND CORPORATION		
L. BOISCLAIR	7-31-61	A	PURCHASED PART DRAWING		
DESIGN ENGINEER			TYPE SOURCE CONTROL DRAWING		
D. ZANDER	7-31-61		TITLE SEMICONDUCTOR DEVICE, DIODE--		
QUALITY			GERMANIUM, SWITCHING		
R. PATRICK	8-24-61				
STANDARDS					
			CODE IDENT NO.	SIZE	DWG NO.
			90536	C	4907828
FIRST USER	WEIGHT	COMMODITY CODE			
793000		5960			
UNLESS OTHERWISE SPECIFIED			SHEET 1 OF 1		
ALL DIMENSIONS IN INCHES TOLERANCE ON FRACTIONS ± 1/64 DECIMALS ± .005 ANGLES ± .5°			E F I G H J K L		

RRU IDENT, NO. 4907828-00