

JEDEC TYPE NO.	MFG CODE	MFG TYPE NO.	NOMINAL ZENER VOLTAGE Vz @Izt VOLTS	ZENER TEST CURRENT (Izt) mA	MAX. ZENER IMPEDANCE		MAX. DC ZENER CURRENT (Izm) @75°C STUD TEMP mA	TYPICAL ZENER VOLTAGE TEMP COEFF. %/°C
					Zzt @Izt OHMS	Zzk @ 1mA (Izk) OHMS		
1N2970	A	10Z6.8D	6.8	370	1.2	500	1320	.040
1N2971	A	10Z7.5D	7.5	335	1.3	250	1180	.045
1N2972	A	10Z8.2D	8.2	305	1.5	250	1040	.048
1N2973	A	10Z9.1D	9.1	275	2.0	250	960	.050
1N2974	A	10Z10D	10	250	3	250	860	.055
1N2975	A	10Z11D	11	230	3	250	780	.060
1N2976	A	10Z12D	12	210	3	250	720	.065
1N2977	A	10Z13D	13	190	3	250	660	.065
1N2978	A	10Z14D	14	180	3	250	600	.070
1N2979	A	10Z15D	15	170	3	250	560	.070
1N2980	A	10Z16D	16	155	4	250	530	.070
1N2981	A	10Z17D	17	145	4	250	500	.075
1N2982	A	10Z18D	18	140	4	250	460	.075
1N2983	A	10Z19D	19	130	4	250	440	.075
1N2984	A	10Z20D	20	125	4	250	420	.075
1N2985	A	10Z22D	22	115	5	250	380	.080
1N2986	A	10Z24D	24	105	5	250	350	.080
1N2987	A	10Z25D	25	100	6	250	310	.080
1N2988	A	10Z27D	27	95	7	250	300	.085
1N2989	A	10Z30D	30	85	8	300	280	.085
1N2990	A	10Z33D	33	75	9	300	260	.085
1N2991	A	10Z36D	36	70	10	300	230	.085
1N2992	A	10Z39D	39	65	11	300	210	.090
1N2993	A	10Z43D	43	60	12	400	195	.090
1N2994	A	10Z45D	45	55	13	400	185	.090
1N2995	A	10Z47D	47	55	14	400	175	.090
1N2996	A	10Z50D	50	50	15	500	165	.090
1N2997	A	10Z51D	51	50	15	500	162	.090
1N2998	A	10Z52D	52	50	15	500	160	.090
1N2999	A	10Z56D	56	45	16	500	150	.090
1N3000	A	10Z62D	62	40	17	600	130	.090
1N3001	A	10Z68D	68	37	18	600	120	.090
1N3002	A	10Z75D	75	33	22	600	110	.090
1N3003	A	10Z82D	82	30	25	700	100	.090
1N3004	A	10Z91D	91	28	35	800	85	.090
1N3005	A	10Z100D	100	25	40	900	80	.090
1N3006	A	10Z105D	105	25	45	1000	75	.095
1N3007	A	10Z110D	110	23	55	1100	72	.095
1N3008	A	10Z120D	120	20	75	1200	67	.095
1N3009	A	10Z130D	130	19	100	1300	62	.095
1N3010	A	10Z140D	140	18	125	1400	58	.095
1N3011	A	10Z150D	150	17	175	1500	54	.095
1N3012	A	10Z160D	160	16	200	1600	51	.095
1N3013	A	10Z175D	175	14	250	1750	46	.095
1N3014	A	10Z180D	180	14	260	1800	45	.095
1N3015	A	10Z200D	200	12	300	2000	40	.100
	B	SZ1544	24	10	30	250	350	.080

REVISIONS						
ZONE	SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD
H5	A	IN CHART DZ20426 IN Zzk COL. 700 WAS 500	9-3-63	9882		
B5	B	IN PART NO. FORMAT RED & BLACK BANDS WERE REMOVED	11-26-63	10481		
7, A3 B4 C7, H1	C	MFG. CODE COLUMN ADD., 5401 No's ADDED ON VR-101- TOLER. 50 = +5% ADDED. B, SZ1345 ADDED TO CHART, MFG TYPE No. W. DICKSON	7.9.64	11775		
C7, 6, 5 C4, 3	D	SZ1544; 24; 10; 30 WAS SZ1345; 24; 105; 5 TO SZ1544 "FOR VR101-24551 ONLY" ADDED	10.5.64	12502		
	E	ADD. "JEDEC" NOTE; CORRECTED SCHEMATICS; 2; REVISED P/N DESCRIPTIONS	23.6.64	15826		

NOTE: USE JEDEC TYPE NO. EXCEPT AS NOTED IN PART NO. DESCRIPTIONS

STANDARD DRAWING

SPECIFICATIONS

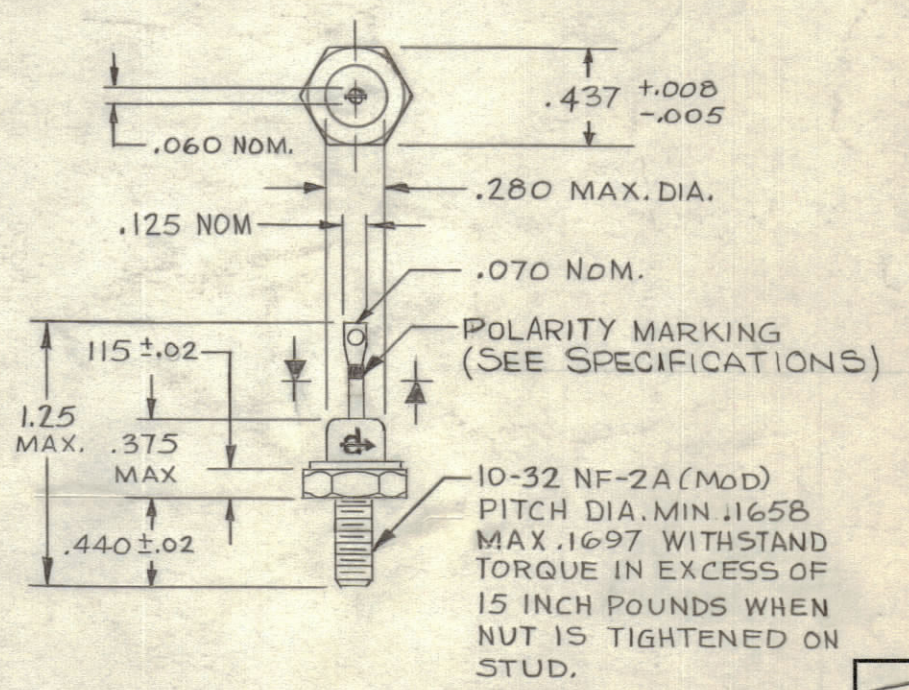
MAXIMUM RATINGS
 JUNCTION AND STORAGE TEMP: -65° TO +175°C
 D.C. POWER DISSIPATION - 10 WATTS

MECHANICAL CHARACTERISTICS
 CASE: INDUSTRY STD. DO-4, 7/16" HEX. STUD WITH 10-32 THREADS, WELDED, HERMETICALLY SEALED METAL AND GLASS.
 FINISH: ALL EXTERNAL SURFACES ARE CORROSION RESISTANT AND TERMINAL SOLDERABLE.
 THERMAL RESISTANCE: 5° C/W (TYPICAL) JUNCTION TO STUD

RED BAND: (ON TERMINAL) INDICATES STANDARD ANODE-TO-STUD POLARITY FOR NEGATIVE-GROUNDED APPLICATIONS.

BLACK BAND: (ON TERMINAL) INDICATES CATHODE-TO-STUD POLARITY FOR POSITIVE GROUNDED APPLICATIONS.

WEIGHT: 7.5 GRAMS
HARDWARE TO BE SUPPLIED BY MANUFACTURE:
 TWO MICA WASHERS, ONE TEFLON BUSHING, FLAT WASHER, NUT AND SOLDER LUG.



FOR VR101-24551 ONLY

PURCHASING NOTES:
 TMC PART NO. (EXCEPT 6.5 VOLT AND +5% -0% TOLERANCES) SHALL BE IN THE FOLLOWING FORM:

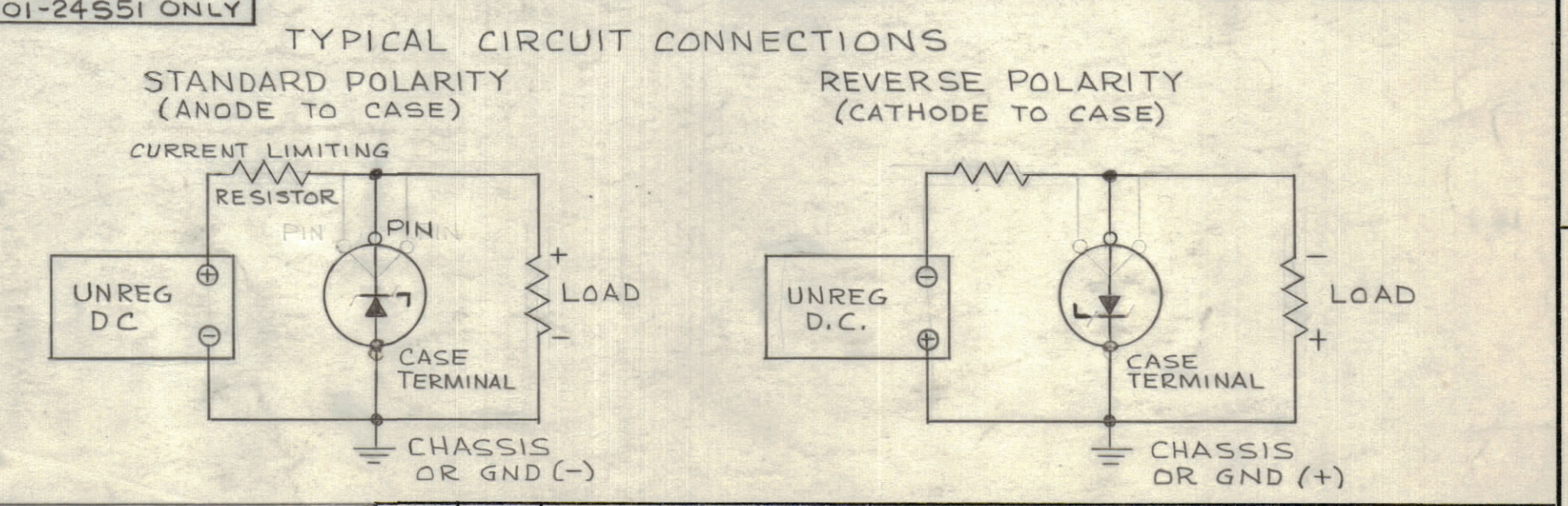
1N2970 R A

BASIC JEDEC NO. | R=REVERSE POL. NOTE - FOR STD. POLARITY, OMIT THIS LETTER | A = ±10% B = ±5% FOR STD TOL (±20%) OMIT THIS LETTER

TMC PART NO. TO BE IN THE FOLLOWING FORM (6.5 VOLT AND +5% -0% TOLERANCE ONLY):

VR-101-6.5 S 20

BASIC | NOM VOLT CODE SEE CHART | POLARITY R=REVERSE POL. (CATH TO STUD BLACK BAND) S= STD POL. (ANODE TO STUD RED. BAND) | TOLERANCE 5 = ±5% 10 = ±10% 20 = ±20% (20% STD) 51 = +5% -0%



PURCHASING NOTE: USE THE FOLLOWING FORM: WHEN USING MFG. PART NO., USE THE FOLLOWING FORM:

10 Z 200D R 5

10 WATTS | MFG CODE ZENER TYPE | NOM VOLT AND MFG CODE | R=REVERSE POL. (CATH TO STUD) NOTE - FOR STD. POLARITY (ANODE TO STUD) OMIT THIS LETTER | TOLERANCE 5 = ±5% 10 = ±10% NOTE - FOR STD. TOL. ±20% OMIT THIS NO.

REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
GELLMAN LIST OF MATERIAL				
MATERIAL			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
FINISH			TITLE DIODE, SILICON, ZENER TYPE 10 WATT	
Q'TY./UNIT	MODEL USED ON	ASS'Y. NO.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES	
SCALE	CODE		DRAWN M. TANTILLO	DATE 8-6-62
			CHECKED [Signature]	DATE 8/10/62
THE CONTENTS OF THIS DRAWING ARE THE EXCLUSIVE PROPERTY OF THE TECHNICAL MATERIEL CORP. ITS UNAUTHORIZED USE OR REPRODUCTION IN WHOLE OR IN PART IS STRICTLY FORBIDDEN.			ELECT. DES. [Signature]	DATE
DECIMALS .X ± .05 .XX ± .01 .XXX ± .005			MECH. DES. [Signature]	DATE
TOLERANCES ± 1/64 ANGLES ± 0° 30'			VR-101	
			SHEET	
			REV. LTR.	