

**1N3488-1N3566**

TYPE	MATERIAL	REPLACEMENT	PAGE NUMBER	IDENTIFICATION	RECTIFIERS					ZENER DIODES					
					$V_R$ (volts)	$V_F$ (volts)	$I_O$ (Amps)	$I_R$ (mA)	$I_{surge}$ (Amps)	$V_Z$ (min)	$V_Z$ (nom) *	$T_{ol}$ $V_Z$ %	$P_D$		
					SIGNAL DIODES					REFERENCE DIODES					
					$V_{PRV}$ (volts)	$V_F$ @ $I_F$ (volts)	$I_R$	$t_{rr}$ ( $\mu$ s)	TC %/°C	$V_Z$	T (min) °C	T (max) °C			
1N3488 1N3489 thru 1N3490 1N3491 1N3492 1N3493 1N3494 1N3495	S S S S S S S S S	Varactor Diode, See table on page 1-86 4-Layer Diodes, See table on page 1-96		R R R R R	50 100 200 300 400	1.7 1.7 1.7 1.7 1.7	18 18 18 18 18	1.0 1.0 1.0 1.0 1.0	300 300 300 300 300						
1N3496 1N3497 1N3498	S S S	1N829 1N827 1N825	2-45 2-45 2-45	RD RD RD						0.005 0.002 0.001	6.5 6.5 6.5	0 0 0	75 75 75		
1N3499 1N3500 1N3501 1N3502 1N3503 1N3504 1N3506 1N3507 1N3508 1N3509 1N3510 1N3511	S S S S S S S S S S S S	1N823 1N821 M2640 M2620 M2610 M2605 1N5226B 1N5227B 1N5228B 1N5229B 1N5230B 1N5231B	2-45 2-45 2-52 2-52 2-52 2-52 2-32 2-32 2-32 2-32 2-32 2-32	RD RD RD RD RD RD ZD ZD ZD ZD ZD ZD						0.0005 0.01	6.5 6.5 6.5 6.5 6.5 6.5 3.3* 3.6* 3.9* 4.3* 4.7* 5.1*	0 0 25 25 25 25 5.0 5.0 5.0 5.0 5.0 5.0	75 75 100 100 100 100 400M 400M 400M 400M 400M 400M		
1N3512 1N3513 1N3514 1N3515 1N3516 1N3517 1N3518 1N3519 1N3520 1N3521 1N3522 1N3523	S S S S S S S S S S S S	1N5232B 1N5234B 1N5235B 1N5236B 1N5237B 1N5239B 1N5240B 1N5241B 1N5242B 1N5243B 1N5245B 1N5246B	2-32 2-32 2-32 2-32 2-32 2-32 2-32 2-32 2-32 2-32 2-32 2-32	ZD ZD ZD ZD ZD ZD ZD ZD ZD ZD ZD ZD							5.6* 6.2* 6.8* 7.5* 8.2* 9.1* 10* 11* 12* 13* 15* 16*	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	400M 400M 400M 400M 400M 400M 400M 400M 400M 400M 400M 400M		
1N3524 1N3525 1N3526 1N3527 1N3528 1N3529 1N3530 1N3531 1N3532 1N3533 1N3534 1N3535 1N3536	S S S S S S S S S S S S S	1N5248B 1N5250B 1N5251B 1N5252B 1N5254B 1N5256B 1N5257B 1N5258B 1N5259B 1N5260B 1N5261B	2-32 2-32 2-32 2-32 2-32 2-32 2-32 2-32 2-32 2-32 2-32	ZD ZD ZD ZD ZD ZD ZD ZD ZD ZD ZD							18* 20* 22* 24* 27* 30* 33* 36* 39* 43* 47*	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	400M 400M 400M 400M 400M 400M 400M 400M 400M 400M 400M		
1N3537 1N3538 1N3539 1N3539A 1N3540 1N3540A 1N3541 1N3541A 1N3542 1N3542A 1N3543 1N3543A 1N3544	S S S S S S S S S S S S S	1N4741A† Backward Diode Backward Diode Backward Diode Backward Diode Backward Diode Backward Diode Backward Diode Backward Diode Backward Diode Backward Diode Backward Diode 1N4002	2-29            3-24	ZD GP GP GP GP GP GP GP GP GP GP GP R	150            100	0.549 0.65            1.5	100M 1.0M            0.6	25N            0.2	15            15		12*		1.0W		
1N3545 1N3546 1N3547 1N3548 1N3549 1N3550 1N3551 thru 1N3552 1N3553 1N3554 thru	S S S S S S S S S S S S	1N4003 1N4004 1N4004 1N4005 1N4005 MS Varactor Diodes, See table on page 1-86 1N821 Varactor Diodes, See table on page 1-86	3-24 3-24 3-24 3-24 3-24  2-45  2-45	R R R R R MS RD RD	200 300 400 500 600 180  100	1.5 1.5 1.5 1.5 1.5   1.5	0.6 0.6 0.6 0.6 0.6   0.6	0.2 0.2 0.2 0.2 0.2   0.2	15 15 15 15 15   100		0.0001	6.3	-55	100	
1N3557 1N3558 1N3559 1N3560 thru 1N3562 1N3563 1N3564 1N3565 1N3566	S G S G S S	Matched Pair of 1N751A's, Zener Diode Tunnel Diodes, See table on page 1-92		GP R GP HC R	24 1000 15 6.0 800	1.0 1.2 1.0 2.0 2.25	200M 0.4 40M 2.0A 1.0	20* 0.2 40 25M 0.5							

R — Rectifier, RD — Reference Diode, ZD — Zener Diode, GP — General Purpose, HC — High Conductance ( $\geq 20$  mA @  $\leq 1$  V), HS — High Speed Switch (Max  $t_r < 0.3 \mu$ s), CS — High Conductance, High Speed Switch, MS — Medium Speed Switch, PA — Parametric Amplifier, SP — Special Purpose.

\*Original device is a clipper, requires a pair of units for adequate replacement.

**TUNNEL DIODES INDEX**

1N2927 — 1N3720

TYPE	MATERIAL	$I_P$ (mA)	$I_P/I_V$	$V_P$ (mV)	C $C_J^*$ (pF)	f (GHz)
1N2927	S	0.10	2.5	75	80	
1N2927A	S	0.10	3.2	70	80	
1N2928	S	0.47	2.5	80	100	
1N2928A	S	0.47	3.2	74	100	
1N2929	S	1.0	2.5	80	150	
1N2929A	S	1.0	3.2	75	150	
1N2930	S	4.7	2.5	85	250	
1N2930A	S	4.7	3.2	79	250	
1N2931	S	10	2.5	85	400	
1N2931A	S	10	3.2	80	400	
1N2932	S	22	2.5	90	1200	
1N2932A	S	22	3.2	82	1200	
1N2933	S	47	2.5	90	1800	
1N2933A	S	47	3.2	83	1800	
1N2934	S	100	2.5	90	2500	
1N2934A	S	100	3.2	85	2500	
1N2939	G	1.0	10	65	15	2.2
1N2939A	G	1.0	7.0	60	10	
1N2940	G	1.0	7.7	65	10	2.2
1N2940A	G	1.0	4.4	65	7.0	
1N2941	G	4.7	7.9	65	50	2.6
1N2941A	G	4.7	4.4	65	30	
1N2969	G	2.2	7.6	65	25	2.5
1N2969A	G	2.2	4.5	65	15	
1N3113	GA	1.0	10		10	
1N3114	GA	2.2	10		10	
1N3115	GA	2.2	10		10	
1N3116	GA	4.7	10		15	
1N3117	GA	4.7	9.0		15	
1N3118	GA	10	10	160	20*	
1N3119	GA	10			20	
1N3120	GA	22	10			
1N3128	G	5.0	8.0	65	15	
1N3129	G	20	8.0	90	20	
1N3130	G	50	8.0	120	25	
1N3138	GA	50	13	260	30	
1N3149	G	10	7.7	65	90	2.6
1N3149A	G	10	4.4	65	50	
1N3150	G	22	7.6	65	125	2.2
1N3217	G	0.47	4.7		8.0	
1N3218	G	1.0	5.0		10	
1N3218A	G	1.0	5.0		5.0	
1N3219	G	2.2	5.0		20	
1N3219A	G	2.2	5.0		10	
1N3220	G	4.7	4.7		30	
1N3221	G	10	5.0	65	100	2.6
1N3221A	G	10	6.0		35	
1N3222	G	22	5.1		150	
1N3560	G	1.0	5.0	55	20	1.3
1N3561	G	1.0	8.0	55	20	1.3
1N3562	G	5.0	6.0	55	85	1.3
1N3712	G	1.0	5.0	65	10	2.3
1N3713	G	1.0	7.0	65	5.0	3.2
1N3714	G	2.2	4.2	65	25*	2.2
1N3715	G	2.2	7.0	65	10	3.0
1N3716	G	4.7	4.0	65	50	1.8
1N3717	G	4.7	7.6	65	25	3.4
1N3718	G	10	4.1	65	90	1.6
1N3719	G	10	7.0	65	50	
1N3720	G	22	4.2	65	150	1.6