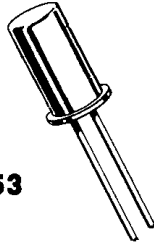


TYPE	MATERIAL	REPLACEMENT	PAGE NUMBER	IDENTIFICATION	RECTIFIERS					ZENER DIODES			
					V <sub>R</sub> (volts)	V <sub>F</sub> (volts)	I <sub>O</sub> (Amps)	I <sub>R</sub> (mA)	I <sub>surge</sub> (Amps)	V <sub>Z</sub> (min)	V <sub>Z</sub> (nom) *	Tol V <sub>Z</sub> %	P <sub>D</sub>
					SIGNAL DIODES					REFERENCE DIODES			
					PRV (volts)	V <sub>F</sub> @ I <sub>F</sub> (volts)	I <sub>R</sub>	t <sub>rr</sub> (μs)	TC %/°C	V <sub>Z</sub>	T (min) °C	T (max) °C	
1N1285	S			R	300		160	40					
1N1286	S			R	400		160	40					
1N1287	S			R	500		160	40					
1N1291	S			R	50		160	40					
1N1292	S			R	100		160	40					
1N1293	S			R	150		160	40					
1N1294	S			R	200		160	40					
1N1295	S			R	300		160	40					
1N1296	S			R	400		160	40					
1N1297	S			R	500		160	40					
1N1301	S			R	50	0.63	17.5	15	300				
1N1302	S			R	100	0.63	17.5	5.0	300				
1N1304	S			R	200	0.63	17.5	5.0	300				
1N1306	S			R	300	0.63	17.5	5.0	300				
1N1313	S		2-13	ZD						8*	5.0	150M	
1N1313A	S		2-13	ZD						9.1*	5.0	150M	
1N1314	S		2-13	ZD						10*	5.0	150M	
1N1314A	S		2-13	ZD						10*	5.0	150M	
1N1315	S		2-13	ZD						12*	5.0	150M	
1N1315A	S		2-13	ZD						12*	5.0	150M	
1N1316	S		2-13	ZD						15*	5.0	150M	
1N1316A	S		2-13	ZD						15*	5.0	150M	
1N1317	S		2-13	ZD						20*	5.0	150M	
1N1317A	S		2-13	ZD						18*	5.0	150M	
1N1318	S		2-13	ZD						25*	5.0	150M	
1N1318A	S		2-13	ZD						22*	5.0	150M	
1N1319	S		2-13	ZD						30*	5.0	150M	
1N1319A	S		2-13	ZD						27*	5.0	150M	
1N1320	S		2-13	ZD						35*	5.0	150M	
1N1320A	S		2-13	ZD						33*	5.0	150M	
1N1321	S		2-13	ZD						40*	5.0	150M	
1N1321A	S		2-13	ZD						39*	5.0	150M	
1N1322	S		2-13	ZD						50*	5.0	150M	
1N1322A	S		2-13	ZD						47*	5.0	150M	
1N1323	S		2-13	ZD						60*	5.0	150M	
1N1323A	S		2-13	ZD						56*	5.0	150M	
1N1324	S		2-13	ZD						70*	5.0	150M	
1N1325	S		2-13	ZD						90*	5.0	150M	
1N1326	S		2-13	ZD						105*	5.0	150M	
1N1327	S		2-13	ZD						125*	5.0	150M	
1N1329	S			R	1500	1.3	0.1	0.02	2.0				
1N1330	S			R	50		240	50					
1N1331	S			R	100		240	50					
1N1332	S			R	150		240	50					
1N1333	S			R	200		240	50					
1N1334	S			R	300		240	50					
1N1335	S			R	400		240	50					
1N1336	S			R	500		240	50					
1N1341	S	MR1120	3-39	R	50	1.6	6.0	4.0	150				
1N1341A	S	MR1120	3-39	R	50	1.4	6.0	3.0	150				
1N1341B	S			R	50	1.2	6.0	0.45	160				
1N1342	S	MR1121	3-39	R	100	1.6	6.0	4.0	150				
1N1342A	S	MR1121	3-39	R	100	1.4	6.0	2.5	150				
1N1342B	S			R	100	1.2	6.0	0.45	160				
1N1343	S	MR1122	3-39	R	150	1.6	6.0	4.0	150				
1N1343A	S	MR1122	3-39	R	150	1.4	6.0	2.25	150				
1N1343B	S			R	150	1.2	6.0	0.45	160				
1N1344	S	MR1122	3-39	R	200	1.6	6.0	4.0	150				
1N1344A	S	MR1122	3-39	R	200	1.4	6.0	2.0	150				
1N1344B	S			R	200	1.2	6.0	0.45	160				
1N1345	S	MR1123	3-39	R	300	1.6	6.0	4.0	150				
1N1345A	S	MR1123	3-39	R	300	1.4	6.0	1.75	150				
1N1345B	S			R	300	1.2	6.0	0.45	160				
1N1346	S	MR1124	3-39	R	400	1.6	6.0	4.0	150				
1N1346A	S	MR1124	3-39	R	400	1.4	6.0	1.5	150				
1N1346B	S			R	400	1.2	6.0	0.45	160				
1N1347	S	MR1125	3-39	R	500	1.6	6.0	4.0	150				
1N1347A	S	MR1125	3-39	R	500	1.4	6.0	1.25	150				
1N1347B	S			R	500	1.2	6.0	0.45	160				
1N1348	S	MR1126	3-39	R	600	1.6	6.0	4.0	150				
1N1348A	S	MR1126	3-39	R	600	1.4	6.0	1.0	150				
1N1348B	S			R	600	1.2	6.0	0.45	160				
1N1351	S		2-13	ZD						10*	10	10W	
1N1351A	S		2-13	ZD						10*	5.0	10W	
1N1352	S		2-13	ZD						11*	10	10W	
1N1352A	S		2-13	ZD						11*	5.0	10W	
1N1353	S		2-13	ZD						12*	10	10W	
1N1353A	S		2-13	ZD						12*	5.0	10W	
1N1354	S		2-13	ZD						13*	10	10W	
1N1354A	S		2-13	ZD						13*	5.0	10W	
1N1355	S		2-13	ZD						15*	10	10W	
1N1355A	S		2-13	ZD						15*	5.0	10W	

R—Rectifier, RD—Reference Diode, ZD—Zener Diode, GP—General Purpose, HC—High Conductance (≧ 20 mA @ ≦ 1 V), HS—High Speed Switch (Max t<sub>rr</sub> < 0.3 μs), CS—High Conductance, High Speed Switch, MS—Medium Speed Switch, PA—Parametric Amplifier, SP—Special Purpose.

# 1N1313 thru 1N1327

**150 mW**  
**8.75 — 127.5 V**



**CASE 53**

Very low power zener diodes with standard  $\pm 10\%$  tolerances. Available with  $\pm 5.0\%$  tolerance by adding suffix "A" to type number.

Standard cathode-to-case polarity.

For new designs and for industry preferred replacement devices, see 1N5221 series.

## MAXIMUM RATINGS

Junction and Storage Temperature Range:  $-65$  to  $+175^\circ\text{C}$  (Derate  $1\text{ mW}/^\circ\text{C}$  above  $25^\circ\text{C}$ ).

## ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Type	Nominal Voltage $V_Z @ I_{ZT} = 200\ \mu\text{A}$ volts	Max Reverse Current		Test Voltage $V_R$ volts	Type	Nominal Voltage $V_Z @ I_{ZT} = 200\ \mu\text{A}$ volts	Max Reverse Current		Test Voltage $V_R$ volts
		$T_A = 25^\circ\text{C}$ $I_R @ V_R$ $\mu\text{A}$	$T_A = 100^\circ\text{C}$ $I_A @ V_R$ $\mu\text{A}$				$T_A = 25^\circ\text{C}$ $I_R @ V_R$ $\mu\text{A}$	$T_A = 100^\circ\text{C}$ $I_A @ V_R$ $\mu\text{A}$	
1N1313	8.75	0.5	5	6.8	1N1318	23.50	0.1	10	18
1N1314	10.50	0.5	5	8.2	1N1319	28.50	0.1	10	22
1N1315	12.75	0.5	5	10	1N1320	34.50	0.1	10	27
1N1316	15.75	0.5	5	12	1N1321	41.00	0.1	10	33
1N1317	19.00	0.5	5	15	1N1322	48.50	0.1	10	39

Type	Nominal Voltage $V_Z @ I_{ZT} = 200\ \mu\text{A}$ volts	Max Reverse Current		Test Voltage $V_R$ volts
		$T_A = 25^\circ\text{C}$ $I_R @ V_R$ $\mu\text{A}$	$T_A = 100^\circ\text{C}$ $I_A @ V_R$ $\mu\text{A}$	
1N1323	58.00	0.1	10	47
1N1324	71.00	1.0	50	56
1N1325	87.50	1.0	50	68
1N1326	105.0	1.0	50	82
1N1327	127.5	1.0	50	100

Standard types are  $\pm 10\%$  tolerance; suffix "A" denotes  $\pm 5\%$  tolerance.

# 1N1351 thru 1N1375

**10 W**  
**10 — 100 V**



**CASE 56**  
(DO-4)

Recommended for applications requiring an exact replacement only. For new designs and for industry preferred replacement devices, see 1N2970 series.