

1N4558A-1N4605

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) *	Tol V_Z %	P_D
					SIGNAL DIODES					REFERENCE DIODES			
					PRV (volts)	V_F @ I_F (volts)	I_R	t_{rr} (μ s)	TC %/°C	V_Z	T (min) °C	T (max) °C	
1N4558A	S		2-16	ZD							4.3*	10	50W
1N4558B	S		2-16	ZD							4.3*	5.0	50W
1N4559	S		2-16	ZD							4.7*	20	50W
1N4559A	S		2-16	ZD							4.7*	10	50W
1N4559B	S		2-16	ZD							4.7*	5.0	50W
1N4560	S		2-16	ZD							5.1*	20	50W
1N4560A	S		2-16	ZD							5.1*	10	50W
1N4560B	S		2-16	ZD							5.1*	5.0	50W
1N4561	S		2-16	ZD							5.6*	20	50W
1N4561A	S		2-16	ZD							5.6*	10	50W
1N4561B	S		2-16	ZD							5.6*	5.0	50W
1N4562	S		2-16	ZD							6.2*	20	50W
1N4562A	S		2-16	ZD							6.2*	10	50W
1N4562B	S		2-16	ZD							6.2*	5.0	50W
1N4563	S		2-16	ZD							6.8*	20	50W
1N4563A	S		2-16	ZD							6.8*	10	50W
1N4563B	S		2-16	ZD							6.8*	5.0	50W
1N4564	S		2-16	ZD							7.5*	20	50W
1N4564A	S		2-16	ZD							7.5*	10	50W
1N4564B	S		2-16	ZD							7.5*	5.0	50W
1N4565	S		2-45	RD					0.01	6.4	0	75	
1N4565A	S		2-45	RD					0.01	6.4	-55	100	
1N4566	S		2-45	RD					0.005	6.4	0	75	
1N4566A	S		2-45	RD					0.005	6.4	-55	100	
1N4567	S		2-45	RD					0.002	6.4	0	75	
1N4567A	S		2-45	RD					0.002	6.4	-55	100	
1N4568	S		2-45	RD					0.001	6.4	0	75	
1N4568A	S		2-45	RD					0.001	6.4	-55	100	
1N4569	S		2-45	RD					0.0005	6.4	0	75	
1N4569A	S		2-45	RD					0.0005	6.4	-55	100	
1N4570	S		2-45	RD					0.01	6.4	0	75	
1N4570A	S		2-45	RD					0.01	6.4	-55	100	
1N4571	S		2-45	RD					0.005	6.4	0	75	
1N4571A	S		2-45	RD					0.005	6.4	-55	100	
1N4572	S		2-45	RD					0.002	6.4	0	75	
1N4572A	S		2-45	RD					0.002	6.4	-55	100	
1N4573	S		2-45	RD					0.001	6.4	0	75	
1N4573A	S		2-45	RD					0.001	6.4	-55	100	
1N4574	S		2-45	RD					0.0005	6.4	0	75	
1N4574A	S		2-45	RD					0.0005	6.4	-55	100	
1N4575	S			RD					0.01	6.4	0	75	
1N4575A	S			RD					0.01	6.4	-55	100	
1N4576	S			RD					0.005	6.4	0	75	
1N4576A	S			RD					0.005	6.4	-55	100	
1N4577	S			RD					0.002	6.4	0	75	
1N4577A	S			RD					0.002	6.4	-55	100	
1N4578	S			RD					0.001	6.4	0	75	
1N4578A	S			RD					0.001	6.4	-55	100	
1N4579	S			RD					0.0005	6.4	0	75	
1N4579A	S			RD					0.0005	6.4	-55	100	
1N4580	S			RD					0.01	6.4	0	75	
1N4580A	S			RD					0.01	6.4	-55	100	
1N4581	S			RD					0.005	6.4	0	75	
1N4581A	S			RD					0.005	6.4	-55	100	
1N4582	S			RD					0.002	6.4	0	75	
1N4582A	S			RD					0.002	6.4	-55	100	
1N4583	S			RD					0.0001	6.4	0	75	
1N4583A	S			RD					0.0001	6.4	-55	100	
1N4584	S			RD					0.0005	6.4	0	75	
1N4584A	S			RD					0.0005	6.4	-55	100	
1N4585	S			R	800	1.3	1.0	0.2	50				
1N4586	S			R	1000	1.3	1.0	0.2	50				
1N4587	S			R	100	1.35	150	9.5	3000				
1N4588	S			R	200	1.35	150	9.5	3000				
1N4589	S			R	300	1.35	150	9.0	3000				
1N4590	S			R	400	1.35	150	9.0	3000				
1N4591	S			R	500	1.35	150	8.0	3000				
1N4592	S			R	600	1.35	150	6.5	3000				
1N4593	S			R	800	1.35	150	5.5	3000				
1N4594	S			R	1000	1.35	150	4.5	3000				
1N4595	S			R	1200	1.35	150	4.0	3000				
1N4596	S			R	1400	1.35	150	3.5	3000				
1N4597	S			R	5000	5.0	0.025		1.0				
1N4598	S												
1N4599	S												
1N4600	S	Microwave Mixer:			f = 13,300 MHz,	NF = 9.5 dB							
1N4601	S	Microwave Mixer:			f = 13,300 MHz,	NF = 8.8 dB							
1N4602	S	Microwave Mixer:			f = 13,300 MHz,	NF = 8.0 dB							
1N4603	S	Microwave Mixer:			f = 16,000 MHz,	NF = 9.5 dB							
1N4604	S	Microwave Mixer:			f = 16,000 MHz,	NF = 8.8 dB							
1N4605	S	Microwave Mixer:			f = 16,000 MHz,	NF = 8.0 dB							

R—Rectifier, RD—Reference Diode, ZD—Zener Diode, GP—General Purpose, HC—High Conductance (≥ 20 mA @ ≤ 1 V), HS—High Speed Switch (Max $t_{rr} < 0.3$ μ s), CS—High Conductance, High Speed Switch, MS—Medium Speed Switch, PA—Parametric Amplifier, SP—Special Purpose.

— Reference Diodes —

Type Number	Max Voltage Change ΔV Volts	Temperature Coefficient %/°C For Reference	Max Dynamic Impedance Z_{zt} Ohms	Power Dissipation P mW	Case
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TABLE 1

$V_Z = 6.2 \text{ V} \pm 5\%$ at $I_{ZT} = 7.5 \text{ mA}$
 Test Temperatures: -55, 0, +25, +75, +100°C

1N429	0.050	0.01	20	200 ^①	53
1N821	0.096	0.01	15	†250 ^②	51
1N821A	0.096	0.01	10	†250 ^②	51
1N823	0.048	0.005	15	†250 ^②	51
1N823A	0.048	0.005	10	†250 ^②	51
1N825	0.019	0.002	15	†250 ^②	51
1N825A	0.019	0.002	10	†250 ^②	51
1N827	0.009	0.001	15	†250 ^②	51
1N827A	0.009	0.001	10	†250 ^②	51
1N829	0.005	0.0005	15	†250 ^②	51
1N829A	0.005	0.0005	10	†250 ^②	51
1N1735	0.050	0.01	20	200 ^①	46

TABLE 2

$V_Z = 6.4 \text{ V} \pm 5\%$ at $I_{ZT} = 0.5 \text{ mA}$
 Test Temperatures: 0, 25, 75°C

1N4565	0.048	0.01	200	†250 ^②	51
1N4566	0.024	0.005	200	†250 ^②	51
1N4567	0.010	0.002	200	†250 ^②	51
1N4568	0.005	0.001	200	†250 ^②	51
1N4569	0.002	0.0005	200	†250 ^②	51

TABLE 3

$V_Z = 6.4 \text{ V} \pm 5\%$ at $I_{ZT} = 0.5 \text{ mA}$
 Test Temperatures: -55, 0, +25, +75, +100°C

1N4565A	0.099	0.01	200	†250 ^②	51
1N4566A	0.050	0.005	200	†250 ^②	51
1N4567A	0.020	0.002	200	†250 ^②	51
1N4568A	0.010	0.001	200	†250 ^②	51
1N4569A	0.005	0.0005	200	†250 ^②	51

TABLE 4

$V_Z = 6.4 \text{ V} \pm 5\%$ at $I_{ZT} = 1.0 \text{ mA}$
 Test Temperatures: 0, 25, 75°C

1N4570	0.048	0.01	100	†250 ^②	51
1N4571	0.024	0.005	100	†250 ^②	51
1N4572	0.010	0.002	100	†250 ^②	51
1N4573	0.005	0.001	100	†250 ^②	51
1N4574	0.002	0.0005	100	†250 ^②	51

TABLE 5

$V_Z = 6.4 \text{ V} \pm 5\%$ at $I_{ZT} = 1.0 \text{ mA}$
 Test Temperatures: -55, 0, +25, +75, +100°C

1N4570A	0.099	0.01	100	†250 ^②	51
1N4571A	0.050	0.005	100	†250 ^②	51
1N4572A	0.020	0.002	100	†250 ^②	51
1N4573A	0.010	0.001	100	†250 ^②	51
1N4574A	0.005	0.0005	100	†250 ^②	51

Type Number	Max Voltage Change ΔV Volts	Temperature Coefficient %/°C For Reference	Max Dynamic Impedance Z_{zt} Ohms	Power Dissipation P mW	Case
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TABLE 6

$V_Z = 8.4 \text{ V} \pm 5\%$ at $I_{ZT} = 10 \text{ mA}$
 Test Temperatures: -55, +25, +75, +100°C

1N1530	0.014	0.002	15	250 ^①	57
1N1530A	0.007	0.001	15	250 ^①	57
1N3154	0.130	0.01	15	250 ^②	51
1N3155	0.065	0.005	15	250 ^②	51
1N3156	0.026	0.002	15	250 ^②	51
1N3157	0.013	0.001	15	250 ^②	51

TABLE 7

$V_Z = 8.4 \text{ V} \pm 5\%$ at $I_{ZT} = 10 \text{ mA}$
 Test Temperatures: -55, +25, +100, +150°C

1N3154A	0.172	0.01	15	250 ^②	51
1N3155A	0.086	0.005	15	250 ^②	51
1N3156A	0.034	0.002	15	250 ^②	51
1N3157A	0.017	0.001	15	250 ^②	51

TABLE 8

$V_Z = 8.5 \text{ V} \pm 5\%$ at $I_{ZT} = 0.5 \text{ mA}$
 Test Temperatures: 0, 25, 75°C

1N4775	0.064	0.01	200	250 ^②	51
1N4776	0.032	0.005	200	250 ^②	51
1N4777	0.013	0.002	200	250 ^②	51
1N4778	0.006	0.001	200	250 ^②	51
1N4779	0.003	0.0005	200	250 ^②	51

TABLE 9

$V_Z = 8.5 \text{ V} \pm 5\%$ at $I_{ZT} = 0.5 \text{ mA}$
 Test Temperatures: -55, 0, +25, +75, +100°C

1N4775A	0.132	0.01	200	250 ^②	51
1N4776A	0.066	0.005	200	250 ^②	51
1N4777A	0.026	0.002	200	250 ^②	51
1N4778A	0.013	0.001	200	250 ^②	51
1N4779A	0.007	0.0005	200	250 ^②	51

TABLE 10

$V_Z = 8.5 \text{ V} \pm 5\%$ at $I_{ZT} = 1.0 \text{ mA}$
 Test Temperatures: 0, 25, 75°C

1N4780	0.064	0.01	100	250 ^②	51
1N4781	0.032	0.005	100	250 ^②	51
1N4782	0.013	0.002	100	250 ^②	51
1N4783	0.006	0.001	100	250 ^②	51
1N4784	0.003	0.0005	100	250 ^②	51

① $T_J = -65 \text{ to } +150^\circ\text{C}$

② $T_J = -65 \text{ to } +175^\circ\text{C}$

† The indicated power rating is recommended for conservative design limits in critical high reliability applications. Registered power ratings vary from 250 mW to 500 mW. All devices indicated are supplied in the 400 mW glass package.