

Silicon Diodes, Bidirectional Zener Diodes

General Purpose and Switching Diodes (DO-35 Glass Package)

Type	Peak Inv. Voltage PIV	Max. Aver. Rectified Current I_o	Power Dissipation at 25 °C	Junction Temperature T_j	Forward Voltage Drop V_F	Reverse Current I_R		Reverse Recovery Time		
						at I_F		at V_R		
						Volts	mA	max. nA	Volts	t_{rr} ns
BAV19	120	200	500	200	1.0	100	100	100	max. 50	$I_F = I_R = 30$ mA, $R_L = 100$ Ω to $I_R = 3$ mA
BAV20	200	200	500	200	1.0	100	100	150	max. 50	$I_F = I_R = 30$ mA, $R_L = 100$ Ω to $I_R = 3$ mA
BAV21	250	200	500	200	1.0	100	100	200	max. 50	$I_F = I_R = 30$ mA, $R_L = 100$ Ω to $I_R = 3$ mA
1N914	100	75	500	200	1.0	10	25	20	max. 4.0	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA
1N4148	100	150	500	200	1.0	10	25	20	max. 4.0	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA
1N4149	100	150	500	200	1.0	10	25	20	max. 4.0	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA
1N4150	50	200	500	200	1.0	200	100	50	max. 4.0	$I_F = I_R = 10$ to 200 mA, to 0.1 I_F
1N4151	75	150	500	200	1.0	50	50	50	max. 2.0	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA
1N4448	100	150	500	200	1.0	100	25	20	max. 4.0	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA
1N4454	75	150	500	200	1.0	10	100	50	max. 4.0	$I_F = I_R = 10$ mA, to $I_R = 1$ mA

General Purpose and Switching Diodes (DO-34 Glass Package)

Type	Peak Inv. Voltage PIV	Max. Aver. Rectified Current I_o	Power Dissipation at 25 °C	Junction Temperature T_j	Forward Voltage Drop V_F	Reverse Current I_R		Reverse Recovery Time		
						at I_F		at V_R		
						Volts	mA	max. nA	Volts	t_{rr} ns
BAV19S	120	200	500	200	1.0	100	100	100	max. 50	$I_F = I_R = 30$ mA, $R_L = 100$ Ω to $I_R = 3$ mA
BAV20S	200	200	500	200	1.0	100	100	150	max. 50	$I_F = I_R = 30$ mA, $R_L = 100$ Ω to $I_R = 3$ mA
BAV21S	250	200	500	200	1.0	100	100	200	max. 50	$I_F = I_R = 30$ mA, $R_L = 100$ Ω to $I_R = 3$ mA
1N4148S	100	150	500	200	1.0	10	25	20	max. 4.0	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA
1N4149S	100	150	500	200	1.0	10	25	20	max. 4.0	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA
1N4150S	50	200	500	200	1.0	200	100	50	max. 4.0	$I_F = I_R = 10$ to 200 mA, to 0.1 I_F
1N4151S	75	150	500	200	1.0	50	50	50	max. 2.0	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA
1N4448S	100	150	500	200	1.0	100	25	20	max. 4.0	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA
1N4454S	75	150	500	200	1.0	10	100	50	max. 4.0	$I_R = 10$ mA, to $I_R = 1$ mA

Bidirectional Zener Diodes (17-02 Plastic Package)

for clipping peaks in telephone circuits and for general applications. All parameters are valid for both current directions. Any diode destroyed by overload shows a short-circuit caused by through-alloying the junction.

Type	Zener Voltage Range at $I_Z = 5$ mA	Permissible Pulse Current		Voltage Drop		Temperature Coefficient at $I_Z = 5$ mA	Reverse Voltage at $I_R = 5$ μ A	Capacitance at $V_R = 0$
		at Pulses 8/20	at Pulses 10/1000	at Pulses 8/20	at Pulses 10/1000			
ZZ16	13–19	300	30	30	25	4–10	9.6	1800
ZZ22	18–26	200	20	38	33	4–10	13.2	1400
ZZ36	30–42	130	13	60	53	5–11	21.6	700
ZZ62	52–72	80	8	105	90	6–12	37.2	450
ZZ75	63–87	68	6.8	122	110	6–12	45	350
ZZ91	76–106	56	5.6	146	132	6–12	54.6	300
ZZ110	92–128	45	4.5	178	162	6–12	66	250
ZZ160	135–185	30	3	255	235	6–12	96	200