

1N4148 1N4150 1N4448 Diode, switching, leaded
1N914 1N4153 1N4606
1N916

These diodes are in a glass sealed envelope and are suitable for lead mounting on printed circuit boards.

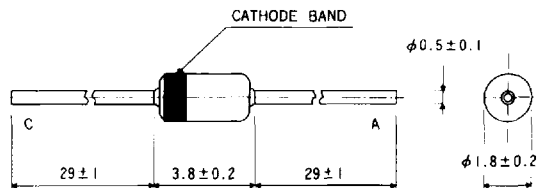
Features

- available in DO-35 package
- part marking, see following table

Applications

- general rectification

Dimensions (Units : mm)



Cathode band color and marking

Part no.	Color	Marking
1N4148	Black	1N4148R
1N4150	Black	1N4150R
1N4153	Black	1N4153R
1N4448	Black	1N4448R
1N4606	Black	1N4606R
1N914	Black	1N914R
1N916	Black	1N916R

Absolute maximum ratings (T_a = 25°C)

Part no.	Peak reverse voltage	DC reverse voltage	Peak forward current	Mean rectifying current	Forward current	Peak forward current	Power dissipation	Junction temperature	Operating temperature	Storage temperature
	V _{RM} (V)	V _R (V)	I _{FM} (mA)	I _O (mA)	I _F (mA)	I _{FSM} 1 μs (A)				
1N4148	100	75	450	150	200	2	500	200	-65 ~ +200	-65 ~ +200
1N4150	50	50	600	200	250	4	500	200	-65 ~ +200	-65 ~ +200
1N4153	75	50	450	150	200	2	500	200	-65 ~ +200	-65 ~ +200
1N4448	100	75	450	150	200	2	500	200	-65 ~ +200	-65 ~ +200
1N4606	85	70	600	200	250	4	500	200	-65 ~ +200	-65 ~ +200
1N914	100	75	450	150	200	2	500	200	-65 ~ +200	-65 ~ +200
1N916	100	75	450	150	200	2	500	200	-65 ~ +200	-65 ~ +200

Switching diodes 1N4148, 1N914, 1N916, 1N4150, 1N4153, 1N4448, 1N4606

Electrical characteristics (unless otherwise noted, $T_a = 25^\circ\text{C}$)

Part no.	Forward voltage V_F (V)											BV (V) Min		Reverse current I_R (μA) max				Cap bet term C_t (pF) $V_R = 0$ $f = 1 \text{ MHz}$	Rev rec time t_{rr} (ns) $V_R = 6 \text{ V}$ $I_F = 10 \text{ mA}$ $R_L = 100 \Omega$
	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	@ 25°C		@ 150°C			
	0.1 mA	0.25 mA	1 mA	2 mA	5 mA	10 mA	20 mA	50 mA	100 mA	200 mA	250 mA	5 μA	100 μA	V_R (V)	V_R (V)	V_R (V)	V_R (V)		
1N4148						1.0						75	100	0.025/5.0	20/75	50.0	20	4	4
1N4150			0.54 ¹ 0.62			0.66 0.74	0.76 0.86	0.82 0.92	0.87 1.00				50	0.1	50	100	50	2.5	4
1N4153	0.49 0.55	0.53 0.59	0.59 0.67	0.62 0.70		0.70 0.81	0.74 0.88					75		0.05	50	50.0	50	2	2
1N4448				0.62 0.72				1.0					100	0.025/5.0	20/75	50.0	20	4	4
1N4606	0.43 0.55		0.54 0.66			0.65 0.77	0.74 0.86	0.79 0.92	0.86 1.00	1.1			85	0.10 0.25	50 70	25.0	50 (100°C)	2.5	4
1N914						1.0						75	100	0.025/5.0	20/75	50.0	20	4	4
1N916						1.0							100	0.025/5.0	20/75	50.0	20	2	4

¹: The upper value for V_F refers to V_F min and the lower to V_F max.

Electrical characteristic curves

1N4148, 1N4448, 1N4448, 1N914

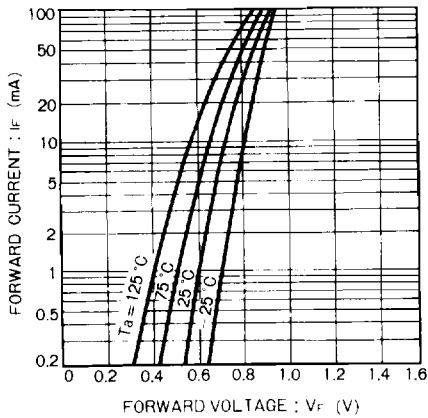


Figure 1

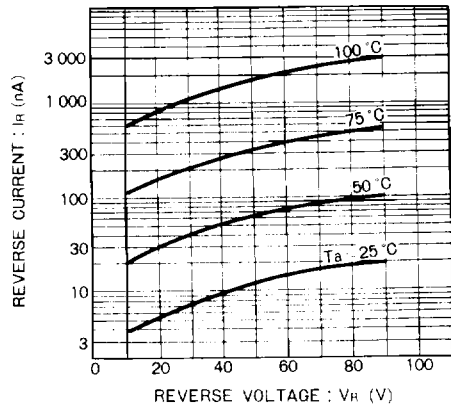


Figure 2

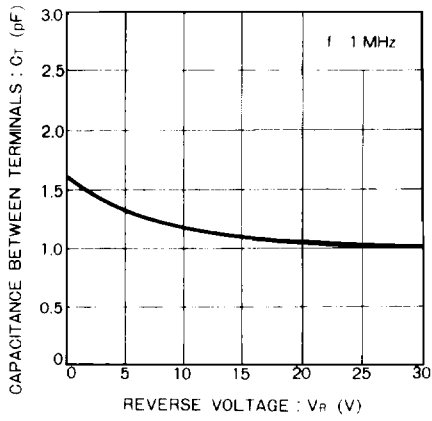


Figure 3

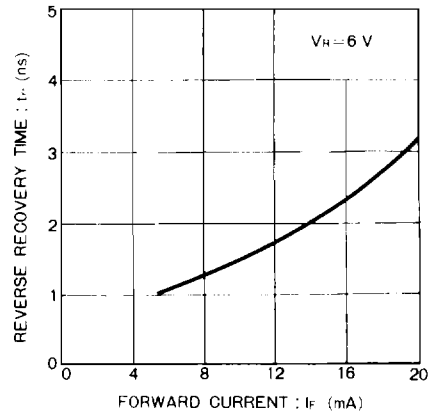


Figure 4

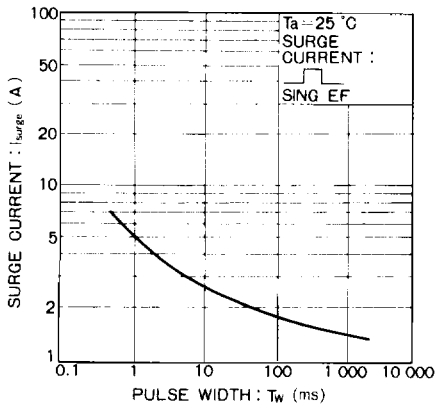


Figure 5

Electrical characteristic curves 1N4150

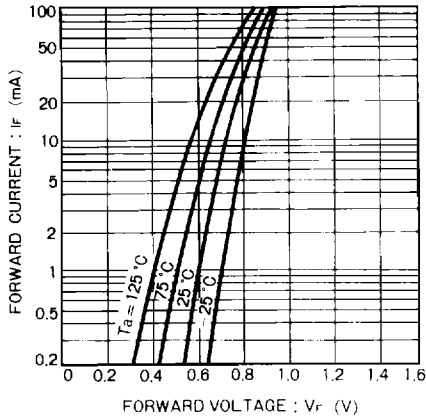


Figure 6

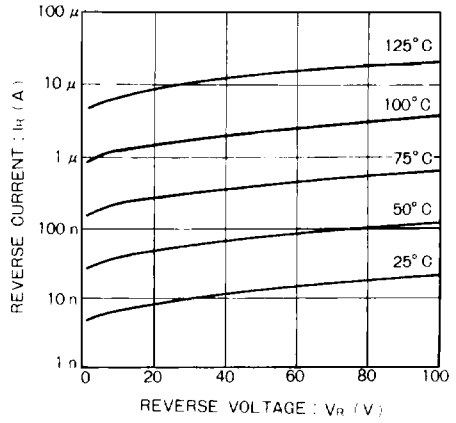


Figure 7

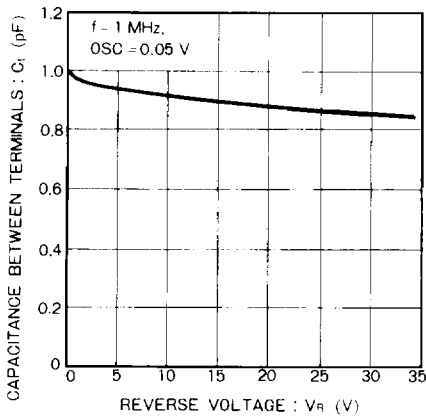


Figure 8

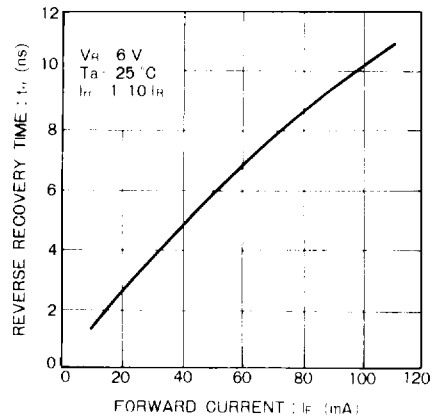


Figure 9

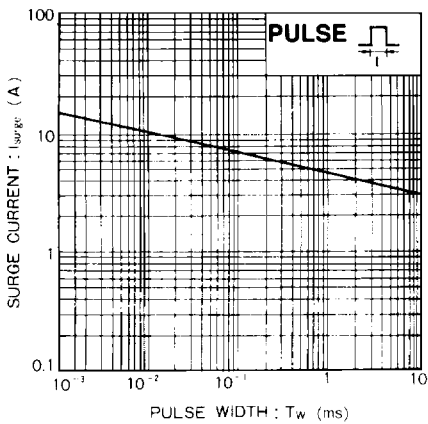


Figure 10

Electrical characteristic curves 1N4153, 1N916

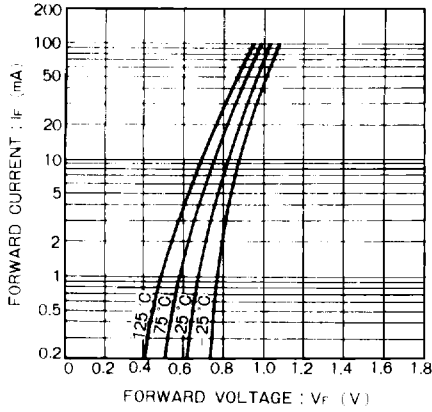


Figure 11

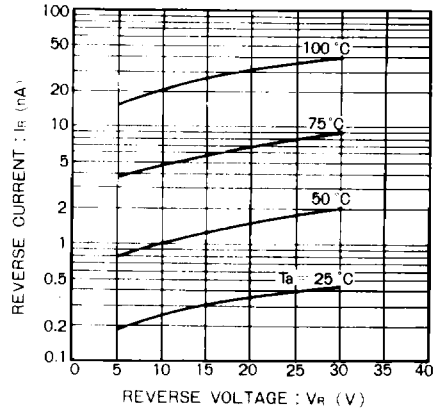


Figure 12

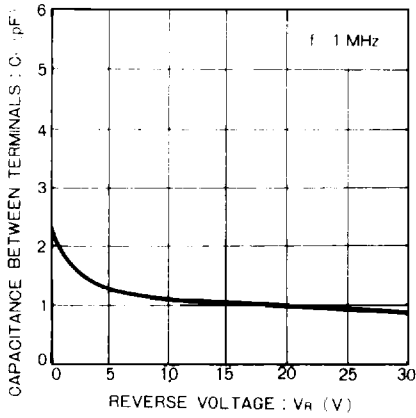


Figure 13

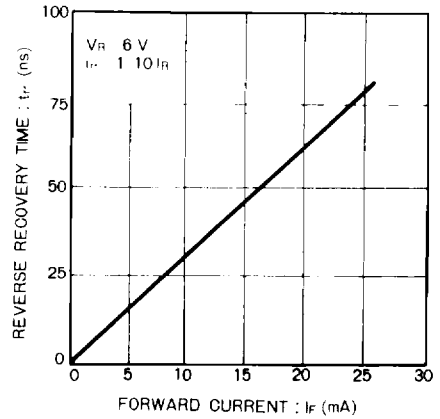


Figure 14

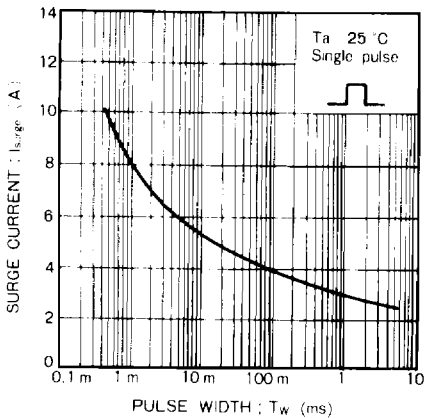
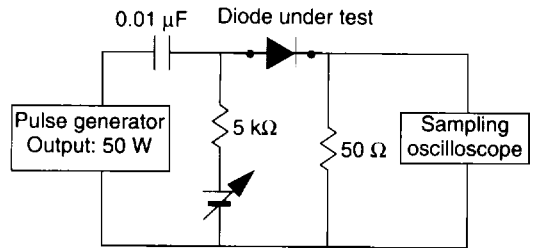


Figure 15



Test circuit for measuring reverse recovery time (t_{rr})

Figure 16