

**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.

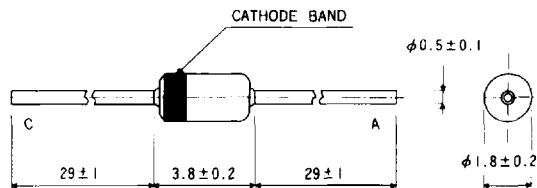
**Features**

- 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<sub>a</sub> = 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 <sub>RM</sub> (V)	V <sub>R</sub> (V)	I <sub>FM</sub> (mA)	I <sub>O</sub> (mA)	I <sub>F</sub> (mA)	I <sub>FSM</sub> 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 $I_R$ ( $\mu\text{A}$ ) max				Cap bet term $C_t$ (pF) $V_R = 0$ $f = 1 \text{ MHz}$	Rev rec time $t_{rr}$ (ns) $V_R = 6 \text{ V}$ $I_F = 10 \text{ mA}$ $R_L = 100 \Omega$
	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	@ 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 $\mu\text{A}$	100 $\mu\text{A}$	$V_R$ (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 <sup>1</sup> 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

<sup>1</sup>: 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

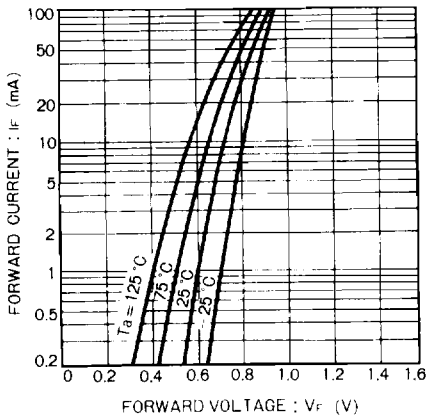


Figure 1

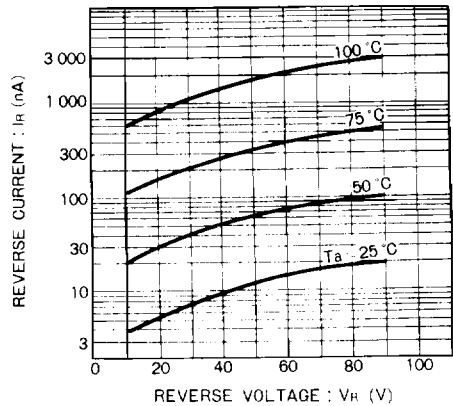


Figure 2

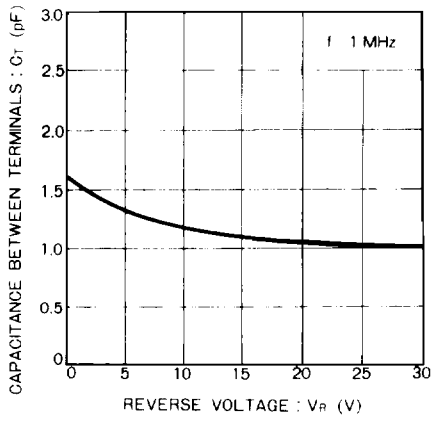


Figure 3

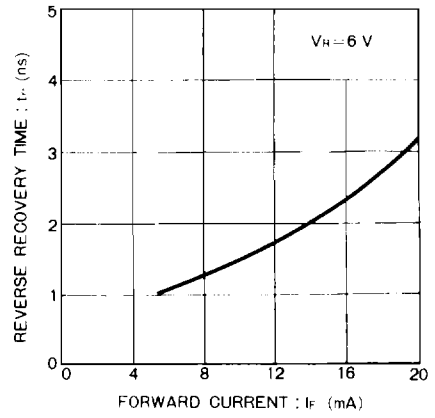


Figure 4

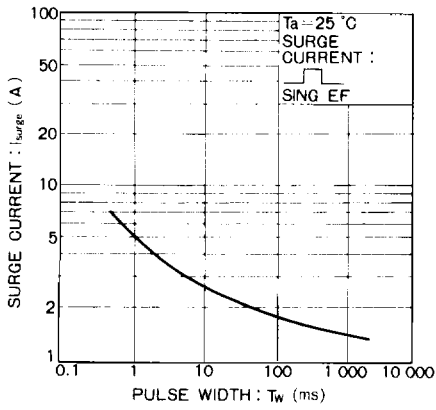


Figure 5

Electrical characteristic curves 1N4150

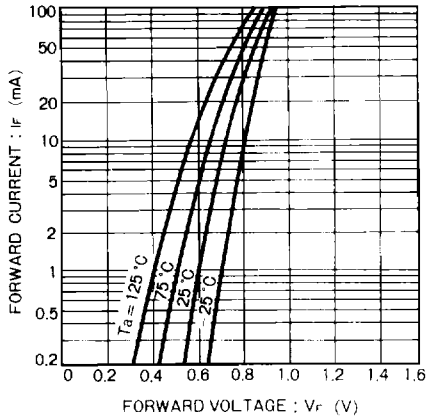


Figure 6

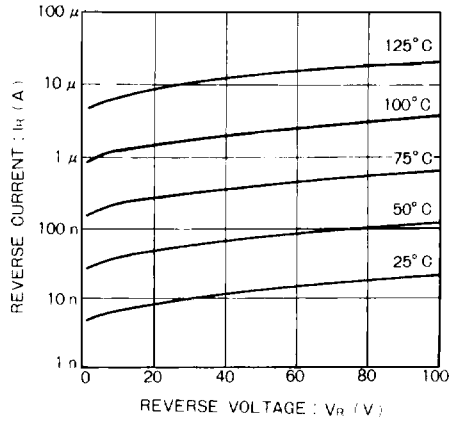


Figure 7

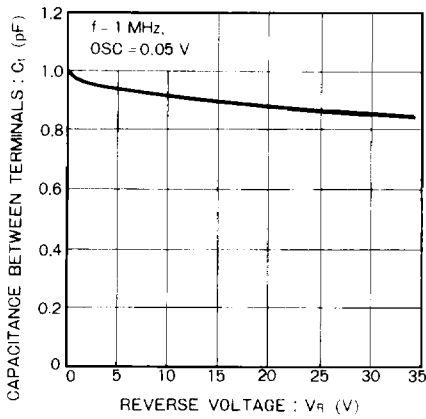


Figure 8

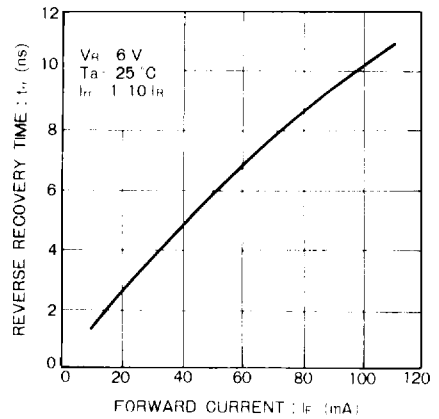


Figure 9

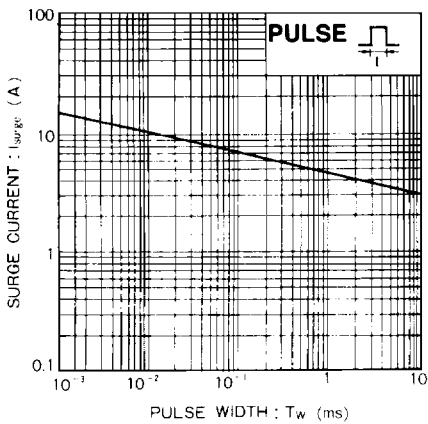


Figure 10

Electrical characteristic curves 1N4153, 1N916

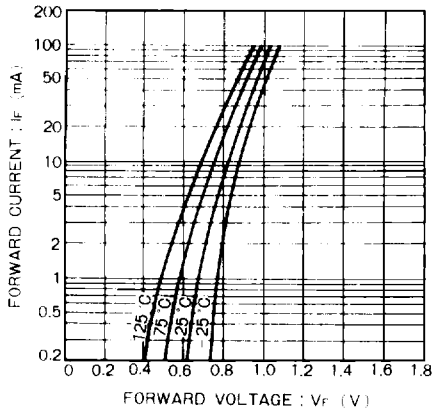


Figure 11

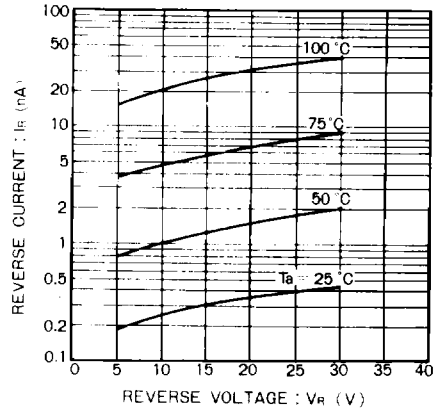


Figure 12

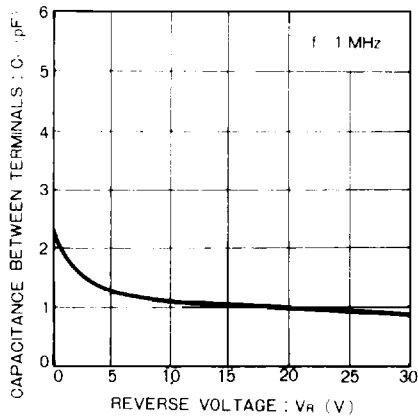


Figure 13

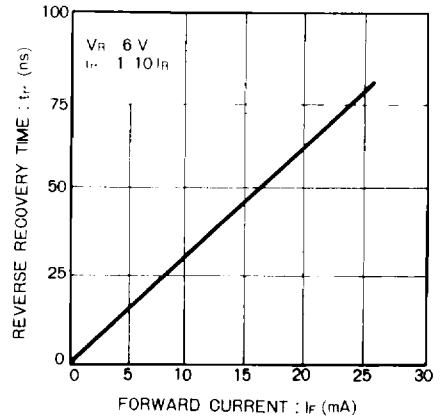


Figure 14

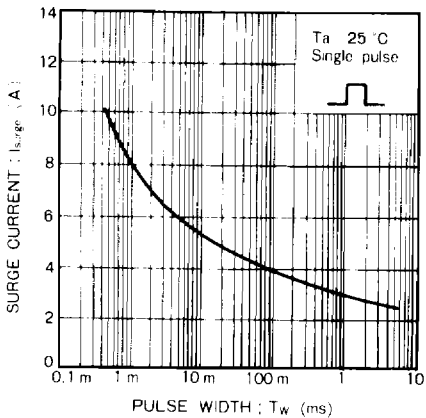
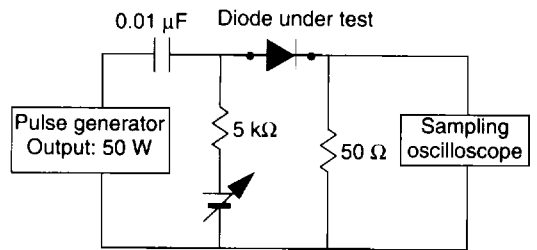


Figure 15



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

Figure 16