

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

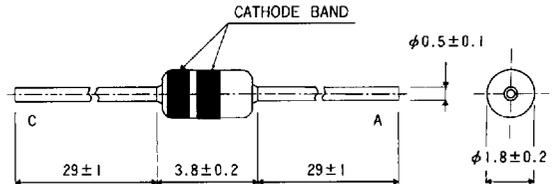
Features

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

Applications

- high speed switching

Dimensions (Units : mm)



Cathode band color

Part no.	Two bands
1SS139	White/White

Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	90	V
DC reverse voltage	V_R	80	V
Peak forward current	I_{FM}	400	mA
Mean rectifying current	I_O	130	mA
Surge current (1 s)	I_{surge}	600	mA
Power dissipation	P_d	300	mW
Junction temperature	T_j	175	$^\circ\text{C}$
Storage temperature	T_{stg}	-65 ~ +175	$^\circ\text{C}$

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

Parameter	Symbol	Min	Typical	Max	Unit	Conditions
Forward voltage	V_F		1.0	1.2	V	$I_F = 100 \text{ mA}$
Reverse current	I_R		0.45	20	nA	$V_R = 30 \text{ V}$
Capacitance between terminals	C_t		2.0	5	pF	$V_R = 0.5 \text{ V}, f = 1 \text{ MHz}$
Reverse recovery time	t_{rr}		30	50	ns	$V_R = 6 \text{ V}, I_F = 10 \text{ mA}, R_L = 50 \Omega$

Electrical characteristic curves

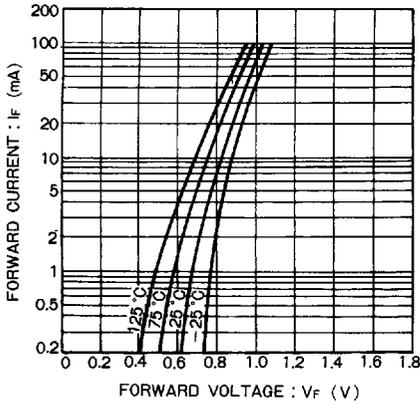


Figure 1

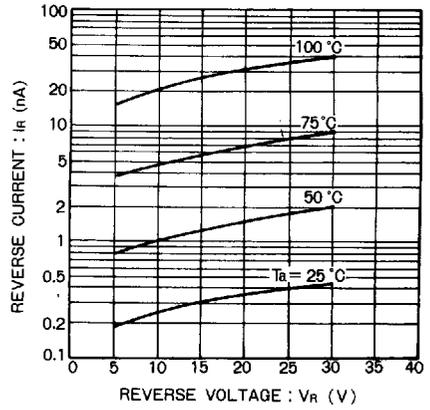


Figure 2

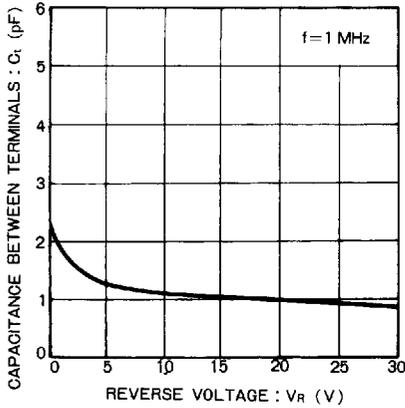


Figure 3

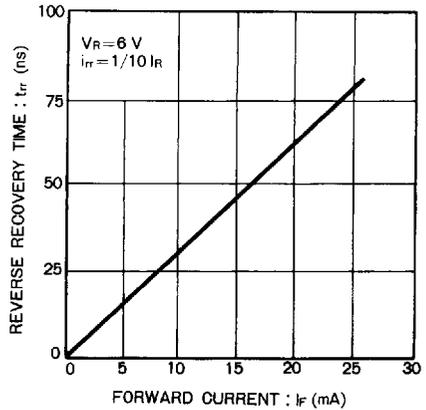


Figure 4

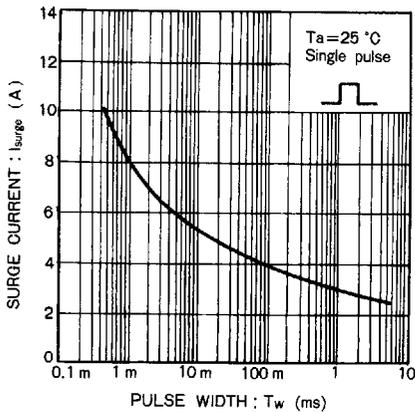
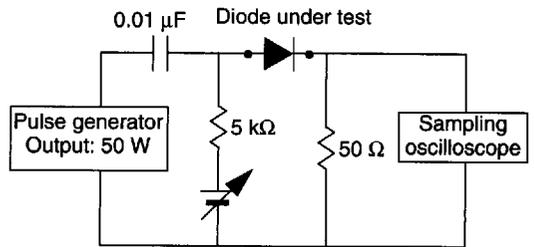


Figure 5



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

Figure 6