1SS131
1SS132
1SS133

Diode, switching, leaded

These diodes are in a glass sealed envelope and are suitable for lead mounting on printed circuit boards. They have a high switching speed. (The reverse recovery time (t_{rr}) is typically 1.5 ns.)

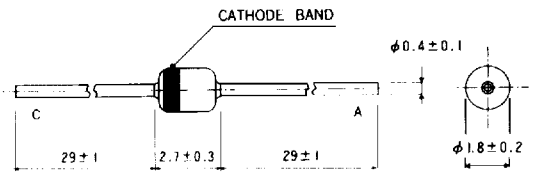
Features

- available in DO-34 package
- part marking, see following table

Applications

- high speed switching

Dimensions (Units : mm)



Cathode band color

Part no.	Color
1SS131	Black
1SS132	Green
1SS133	Yellow

Absolute maximum ratings (T_a = 25°C)

Parameter		Symbol	Limits	Unit	Parameter		Symbol	Limits	Unit
Peak reverse voltage	1SS131	V_{RM}	90	V	Surge current (1 s)	1SS131	I_{surge}	600	mA
	1SS132		55			1SS132		500	
	1SS133		40			1SS133		400	
DC reverse voltage	1SS131	V_R	80	V	Power dissipation	1SS131	P_d	300	mW
	1SS132		50			1SS132			
	1SS133		35			1SS133			
Peak forward current	1SS131	I_{FM}	400	mA	Junction temperature	1SS131	T_j	175	°C
	1SS132		350			1SS132			
	1SS133		300			1SS133			
Mean rectifying current	1SS131	I_O	130	mA	Storage temperature	1SS131	T_{stg}	−65 ~ +175	°C
	1SS132		120			1SS132			
	1SS133		110			1SS133			

Electrical characteristics (unless otherwise noted, T_a = 25°C)

Parameter		Symbol	Min	Typical	Max	Unit	Conditions
Forward voltage	1SS131	V_F		0.92	1.2	V	I_F = 100 mA
	1SS132						
	1SS133						
Reverse current	1SS131	I_R		0.020	0.5	μA	V_R = 80 V
	1SS132			0.012			V_R = 50 V
	1SS133			0.010			V_R = 35
Capacitance between terminals	1SS131	C_t		1.55	2	pF	V_R = 0.5 V, f = 1 MHz
	1SS132			1.55	2		
	1SS133			1.50	3		
Reverse recovery time	1SS131	t_{rr}		1.5	4	ns	V_R = 6 V, I_F = 10 mA
	1SS132						
	1SS133						

Electrical characteristic curves

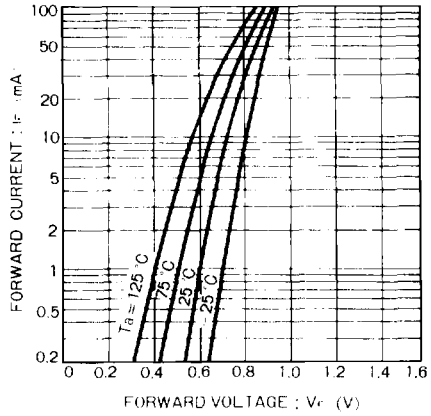


Figure 1

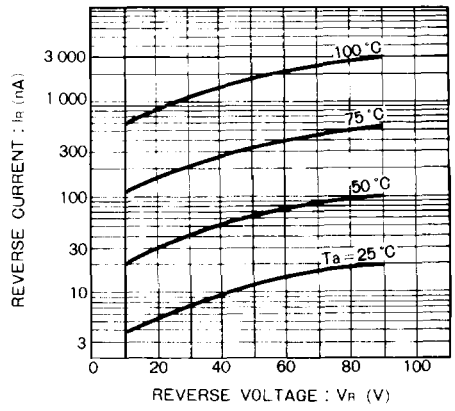


Figure 2

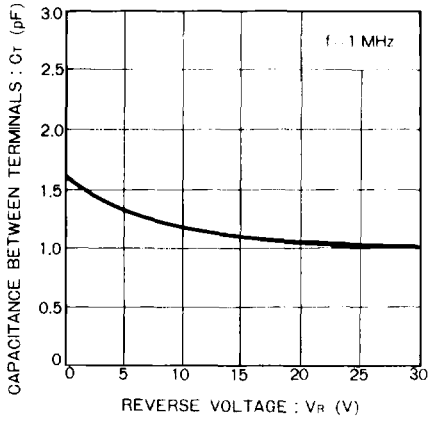


Figure 3

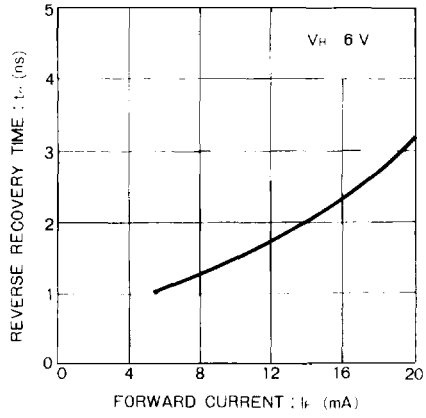


Figure 4

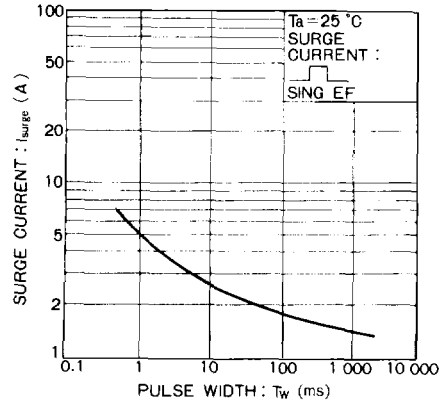
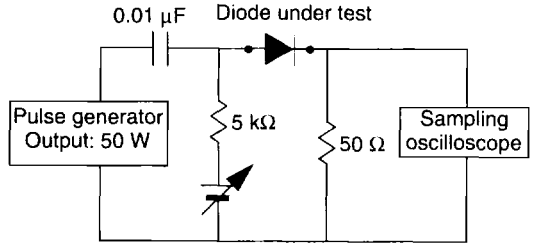


Figure 5



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

Figure 6