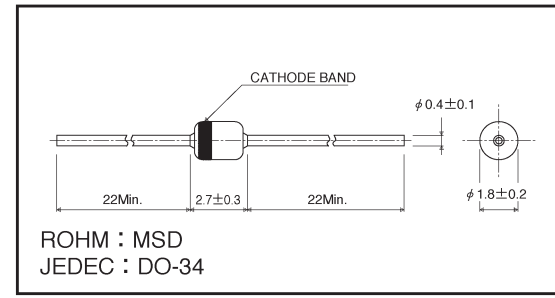
High–speed switching diode
1SS133

●Applications
High speed switching

●Features
1) Glass sealed envelope. (MSD)
2) High reliability.
3) High speed. (typical recovery time = 1.5ns)

●Construction
Silicon epitaxial planar

●External dimensions (Units: mm)



●Cathode band colors

Type	Color
1SS133	Yellow

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit	Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	90	V	Surge current (1s)	I_{surge}	600	mA
DC reverse voltage	V_R	80	V	Power dissipation	P	300	mW
Peak forward current	I_{FM}	400	mA	Junction temperature	Tj	175	℃
Mean rectifying current	I_O	130	mA	Storage temperature	Tstg	−65～+175	℃

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	—	0.92	1.2	V	I_F=100mA
Reverse current	I_R	—	0.020	0.5	μA	V_R=80V
Capacitance between terminals	C_T	—	1.55	2	pF	V_R=0.5V, f=1MHz
Reverse recovery time	t_{rr}	—	1.5	4	ns	V_R=6V, I_F=10mA, R_L=50Ω

●Electrical characteristic curves (Ta = 25°C unless specified otherwise)

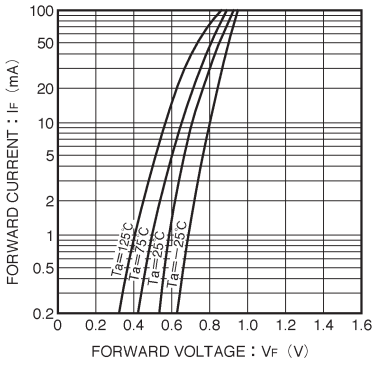


Fig. 1 Forward characteristics

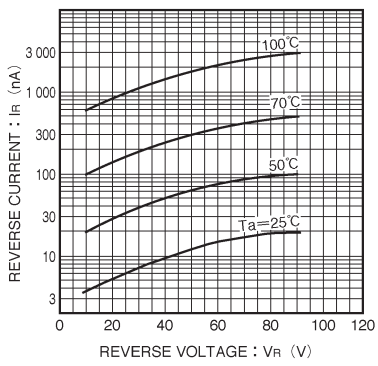


Fig. 2 Reverse characteristics

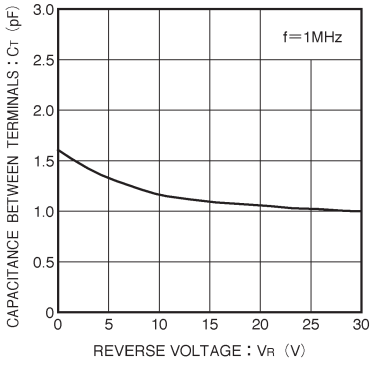


Fig. 3 Capacitance between terminals characteristics

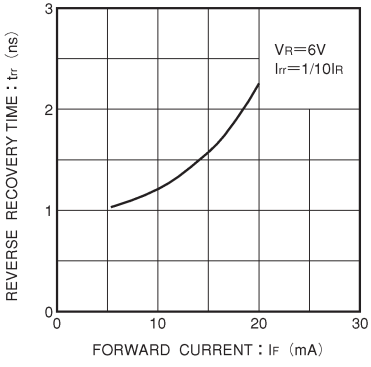


Fig. 4 Reverse recovery time characteristics

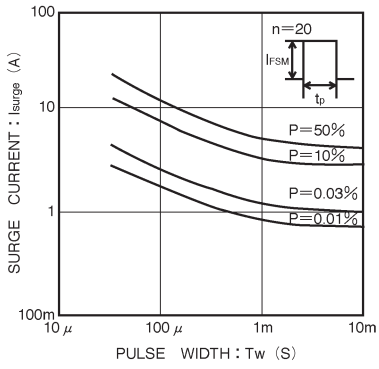


Fig. 5 Surge current characteristics

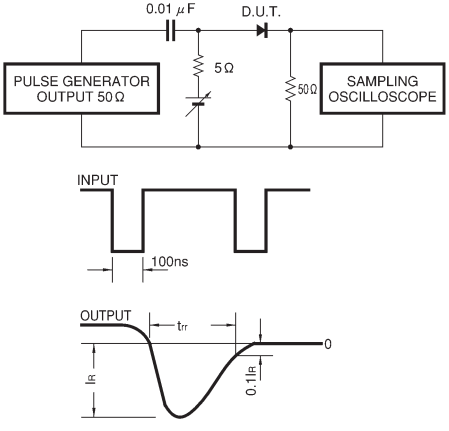


Fig. 6 Reverse recovery time (t_{rr}) measurement circuit