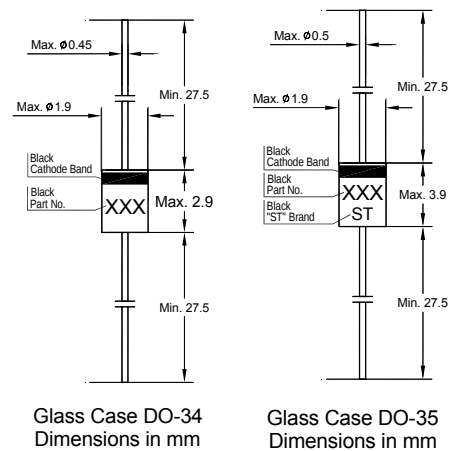


1SS133

HIGH SPEED SWITCHING DIODE

Features

- Glass sealed envelope
- High speed
- High reliability

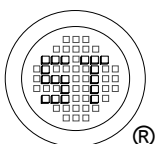


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	90	V
DC Reverse Voltage	V_R	80	V
Mean Rectifying Current	I_O	130	mA
Peak Forward Current	I_{FM}	400	mA
Surge Current (1s)	I_{surge}	600	mA
Power Dissipation	P_{tot}	300	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	- 65 to + 175	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	V_F	1.2	V
Reverse Current at $V_R = 80\text{ V}$	I_R	0.5	μA
Capacitance between Terminals at $V_R = 0.5\text{ V}$, $f = 1\text{ MHz}$	C_T	2	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 50\ \Omega$	t_{rr}	4	ns



SEMTECH ELECTRONICS LTD.

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ISO/TS 16949 : 2002
Certificate No. 05103



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Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098

Dated : 23/06/2007

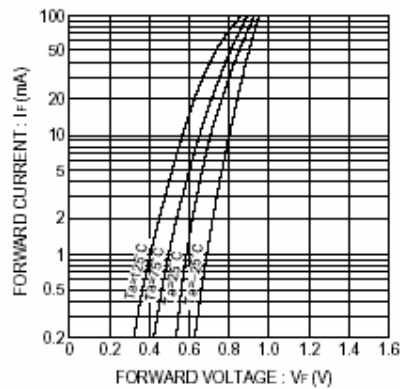


Fig. 1 Forward characteristics

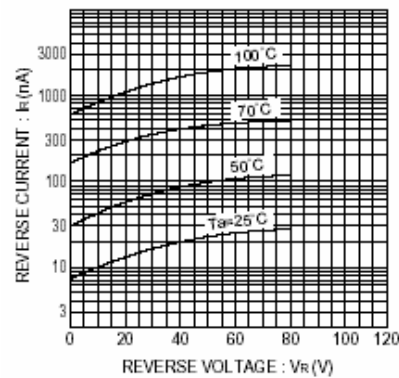


Fig. 2 Reverse characteristics

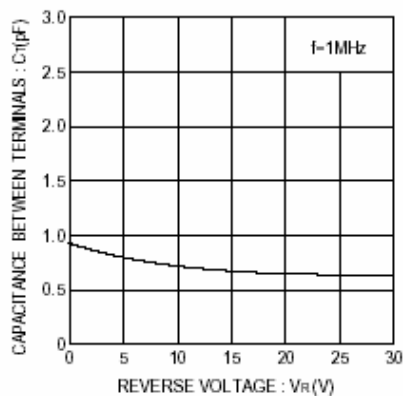


Fig. 3 Capacitance between terminals characteristics

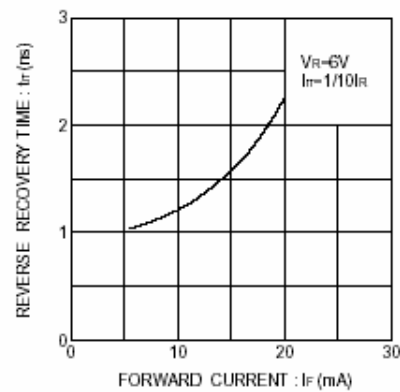


Fig. 4 Reverse recovery time characteristics

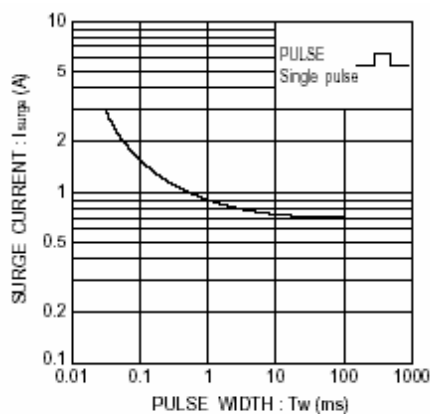


Fig. 5 Surge current characteristics

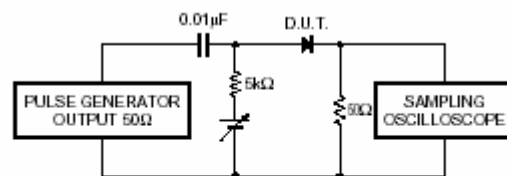
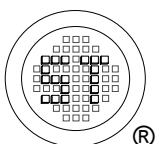


Fig. 6 Reverse recovery time (t_r) measurement circuit



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