

1SS133

HIGH SPEED SWITCHING DIODE

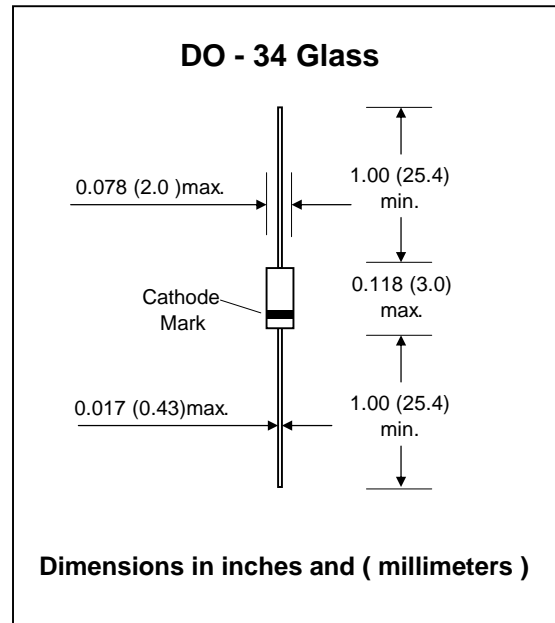
FEATURES :

- High switching speed: max. 4 ns
- Continuous reverse voltage: max. 80 V
- Repetitive peak reverse voltage: max. 90 V
- Pb / RoHS Free

MECHANICAL DATA :

Case: DO-34 Glass Case

Weight: approx. 0.093g



Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RM}	90	V
Maximum Continuous Reverse Voltage	V_R	80	V
Maximum Average Forward Current	I_F	130	mA
Maximum Peak Forward Current	I_{FM}	400	mA
Maximum Power Dissipation	P_D	300	mW
Maximum Non-repetitive Peak Forward Current	I_{FSM}	600	mA
Maximum Junction Temperature	T_J	175	°C
Storage Temperature Range	T_S	-65 to + 175	°C

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

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Current	I_R	$V_R = 80\text{ V}$	-	-	0.5	μA
Forward Voltage	V_F	$I_F = 100\text{ mA}$	-	-	1.2	V
Capacitance between terminals	C_T	$f = 1\text{MHz}; V_R = 0.5$	-	-	2.0	pF
Reverse Recovery Time	T_{rr}	$I_F = 10\text{ mA}, V_R = 6\text{ V}$ $R_L = 50\ \Omega, I_{rr} = 1/10 I_R$	-	-	4.0	ns

RATING AND CHARACTERISTIC CURVES (1SS133)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

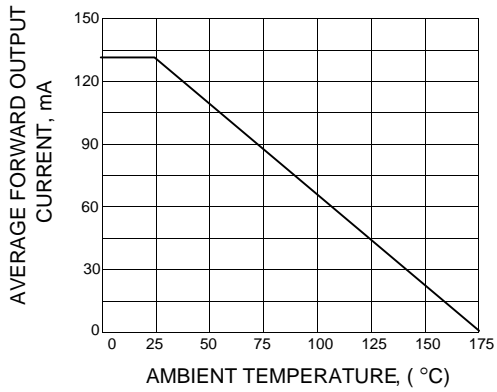


FIG.2 - POWER DERATING CURVE

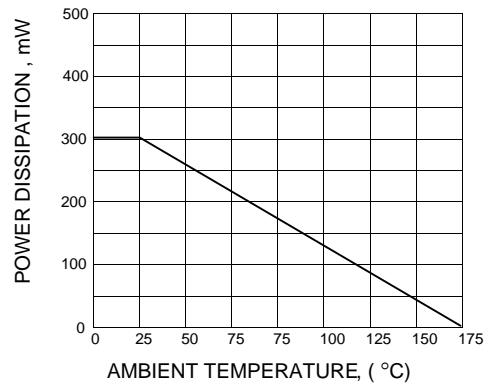


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

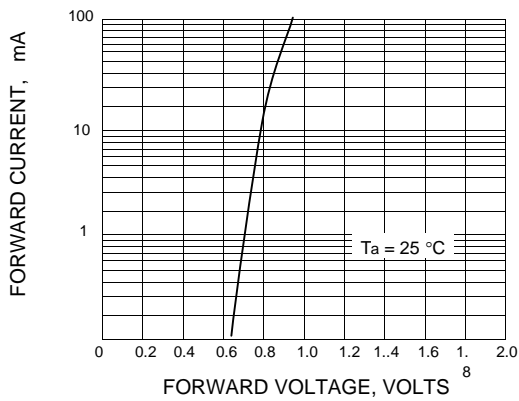


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

