

Small Signal Product

300mW, Hermetically Sealed Glass Switching Diodes

FEATURES

- Fast switching device ($t_{rr} < 4.0 \text{ ns}$)
- Through-hole mount device type
- DO-34 package (JEDEC DO-204)
- Hermetically sealed glass
- Compression bonded construction
- All external surfaces are corrosion resistant and leads are readily solderable
- RoHS compliant
- Solder hot dip Tin (Sn) lead finish
- Cathode indicated by polarity band
- Marking code: 133



DO-34



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	P _D	300	mW
Working Inverse Voltage	W _{IV}	90	V
Average Rectified Current	I _O	150	mA
Non-Repetitive Peak Forward Current	I _{FM}	450	mA
Peak Forward Surge Current	I _{FSURGE}	2	A
Operating Junction Temperature	T _J	+ 175	°C
Storage Temperature Range	T _{STG}	-65 to +200	°C

PARAMETER	SYMBOL	MIN	MAX	UNIT
Breakdown Voltage	B _V	80	--	V
Forward Voltage	V _F		1.2	V
Reverse Leakage Current	I _R		500	nA
Junction Capacitance	C _j	--	4.0	pF
Reverse Recovery Time	t _{rr}	--	4.0	ns

Notes: 1. Reverse Recovery Test Conditions: I_F=I_R=10mA, R_L=100Ω, I_{RR}=1mA

Small Signal Product

RATINGS AND CHARACTERISTICS CURVES

($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig. 1 Forward Characteristics

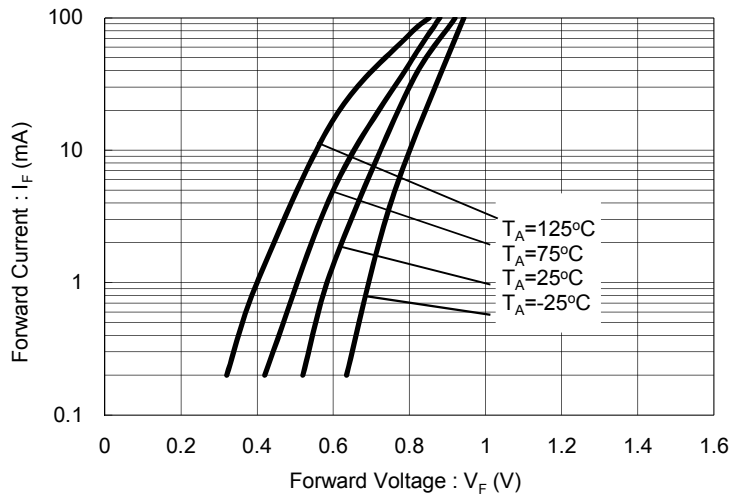


Fig. 2 Reverse Characteristics

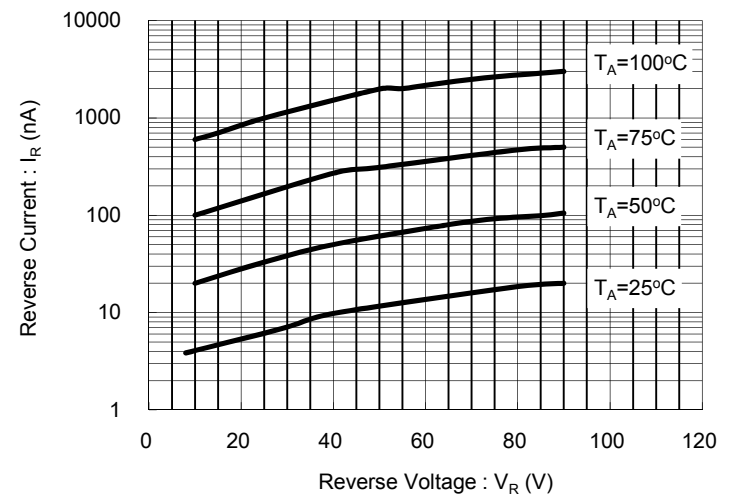


Fig. 3 Capacitance Between Terminals Characteristics

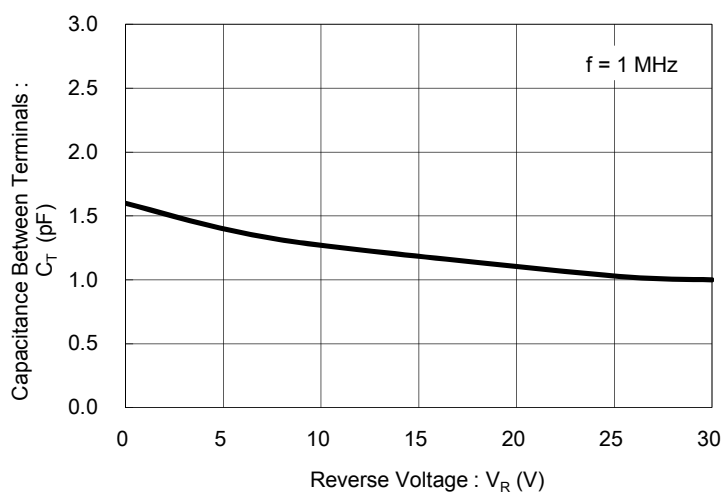


Fig. 4 Reverse Recovery Time Characteristics

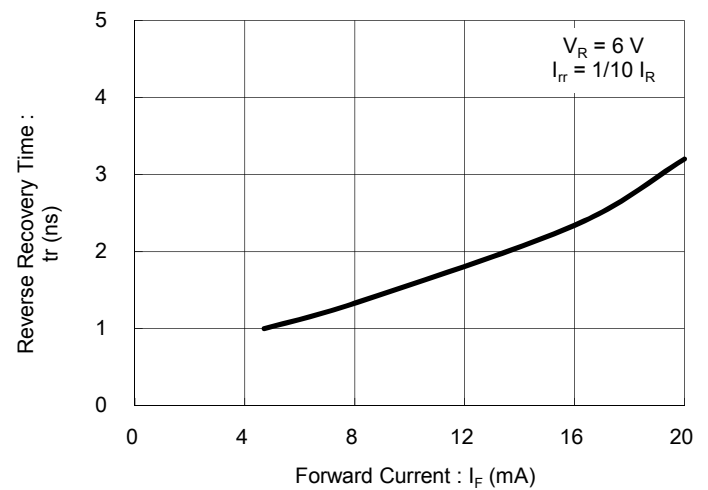


Fig. 5 Surge Current Characteristics

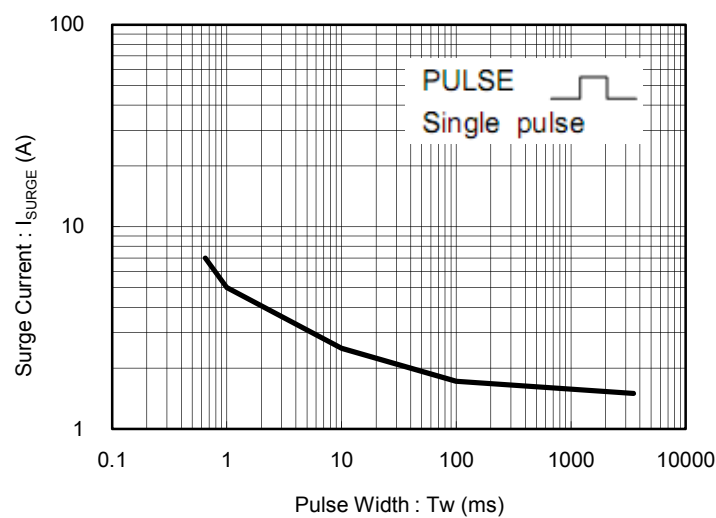
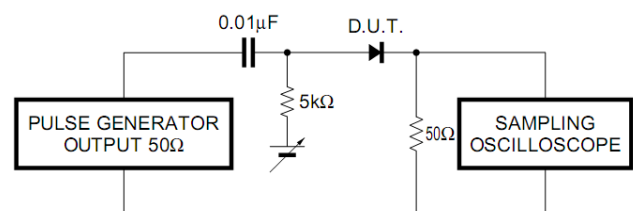


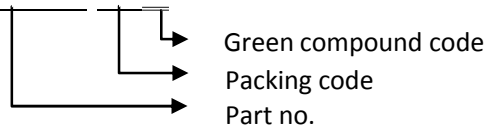
Fig. 6 Reverse Recovery Time (t_{rr}) Measurement Circuit



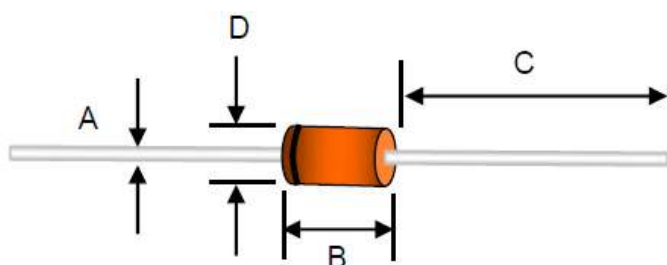
Small Signal Product

ORDER INFORMATION (EXAMPLE)

1SS133M R0G



PACKAGE OUTLINE DIMENSIONS



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	0.30	0.55	0.012	0.022
B	2.16	3.04	0.085	0.120
C	25.40	38.10	1.000	1.500
D	1.27	2.00	0.050	0.079

Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.