



1SS133

DIODE

SMALL SIGNAL SWITCHING DIODE

■ DESCRIPTION

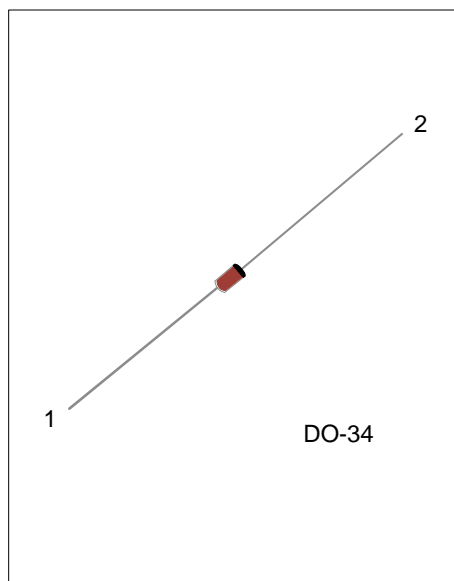
The UTC **1SS133** is a switching diode, it uses UTC's advanced technology to provide the customers with high reliability and ultra small mold type, etc.

The UTC **1SS133** is suitable for high speed switching applications, etc.

■ FEATURES

- * Glass sealed envelope. (MSD)
- * High reliability

■ SYMBOL



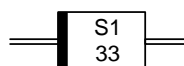
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
1SS133L-Z34-R	1SS133G-Z34-R	DO-34	A	K	Tape Reel
1SS133L-Z34-B	1SS133G-Z34-B	DO-34	A	K	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

<p>1SS133G-Z34-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) B: Tape Box, R: Tape Reel (2) Z34: DO-34 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitance load, derate current by 20%.

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V _{RRM}	90	V
DC Blocking Voltage	V _R	80	V
Average Rectified Output Current	I _O	130	mA
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	600	mA
Power Dissipation	P _D	300	mW
Junction Temperature	T _J	-55 ~ +175	°C
Storage Temperature	T _{STG}	-55 ~ +175	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

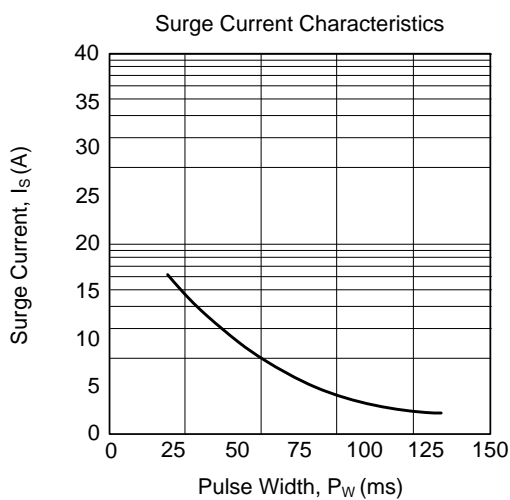
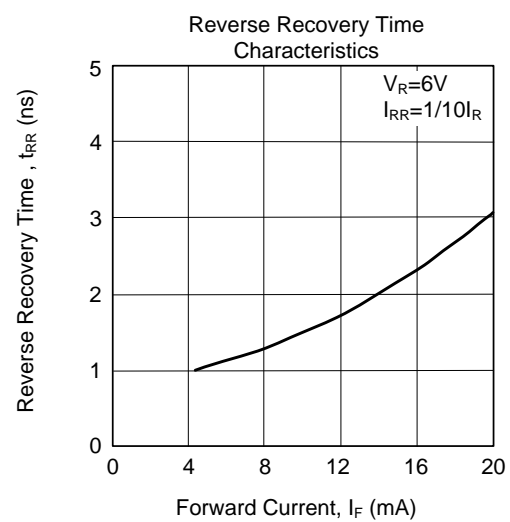
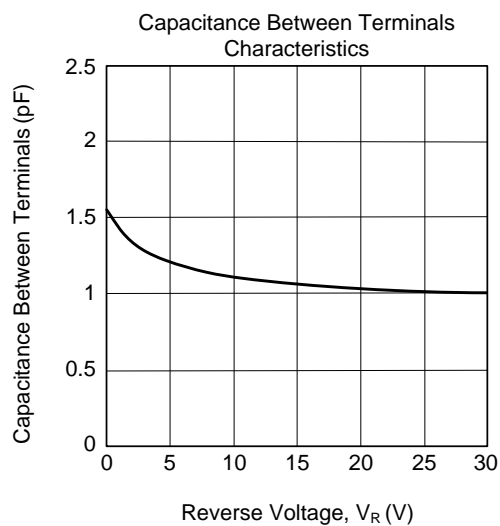
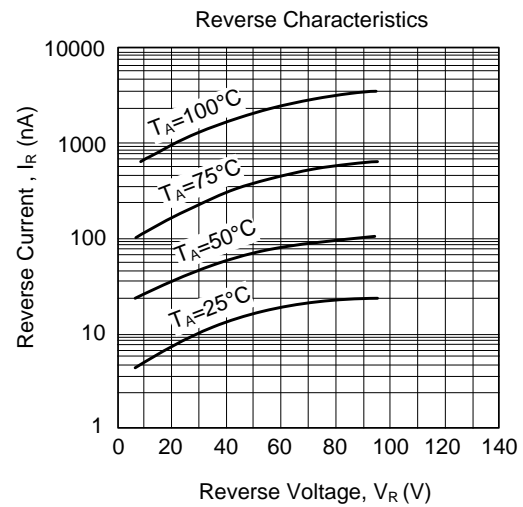
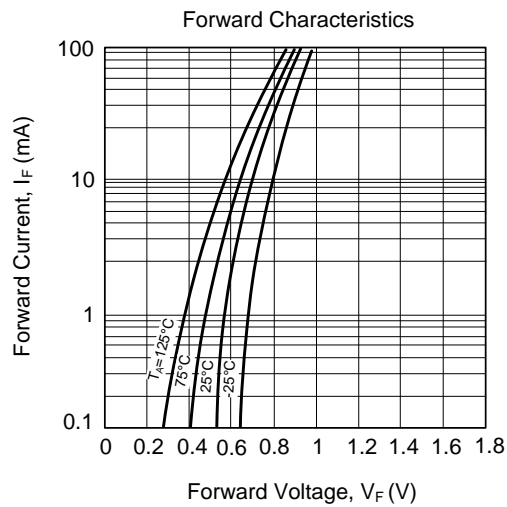
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS

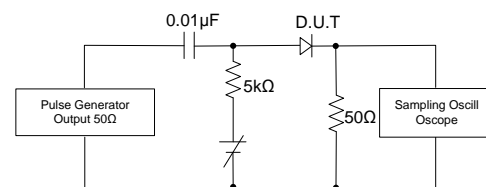
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	V _{(BR)R}	I _R =0.50mA			80	V
Forward Voltage Drop	V _F	I _F =100mA, T _C =25°C			1.2	V
Peak Reverse Current at Rated DC Blocking Voltage	I _R	Rated DC Voltage, T _C =25°C			0.5	μA
		Rated DC Voltage, T _C =150°C			50	μA
Reverse recovery time	t _{rr}	I _F =10mA, V _R =6V, R _L =50Ω			4	ns

Note: Pulse Test: Pulse width ≤ 300μs, Duty cycle ≤ 2%.

■ TYPICAL CHARACTERISTICS



Reverse Recovery Time (t_{rr}) Measurement Circuit



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.