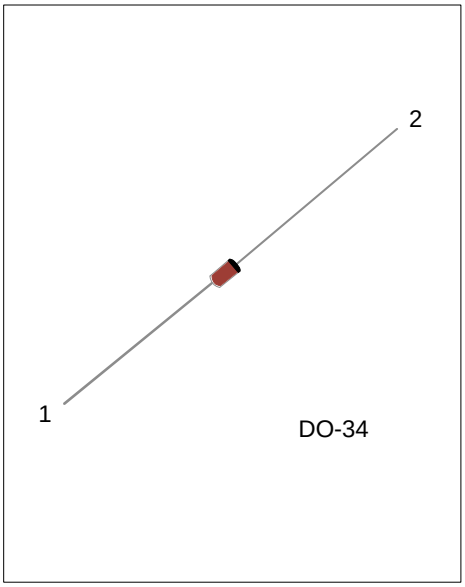
1SS133

DIODE

SMALL SIGNAL SWITCHING DIODE



■ DESCRIPTION

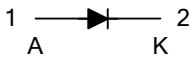
The UTC **1SS133** is a switching diode, it uses UTC's advanced technology to provide the customers with high reliability and ultra small mold type, etc.

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

■ FEATURES

* Glass sealed envelope. (MSD)
* High reliability

■ SYMBOL



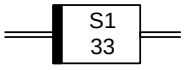
■ ORDERING INFORMATION

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

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

■ 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.

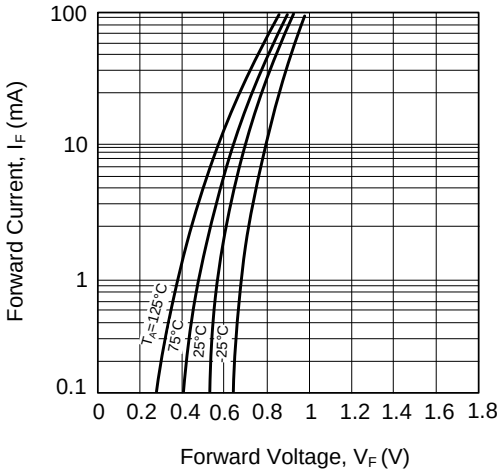
■ ELECTRICAL CHARACTERISTICS

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

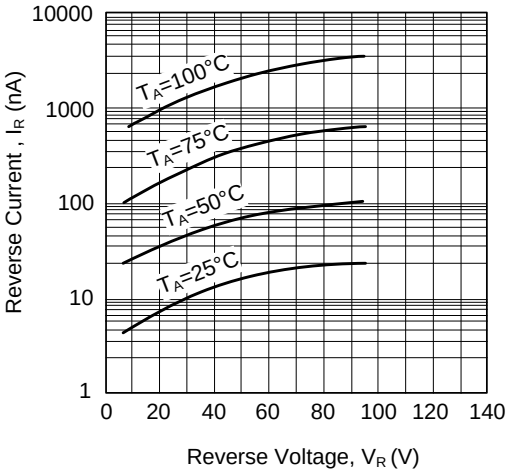
Note: Pulse Test: Pulse width ≤ 300μs, Duty cycle ≤ 2%.

■ TYPICAL CHARACTERISTICS

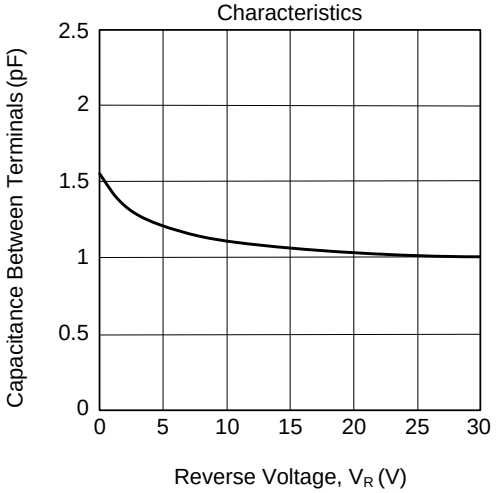
Forward Characteristics



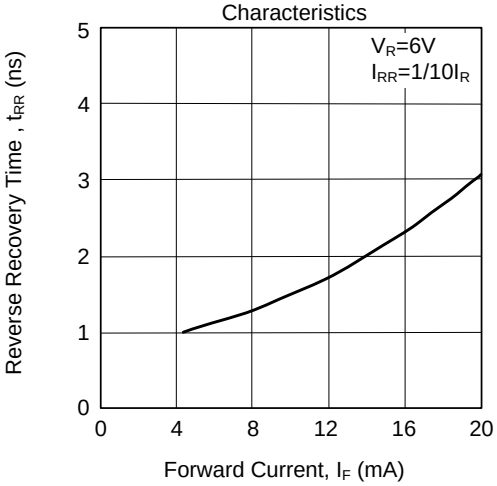
Reverse Characteristics



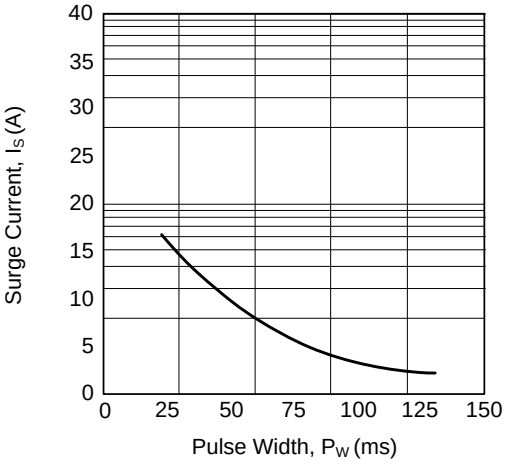
Capacitance Between Terminals Characteristics



Reverse Recovery Time Characteristics



Surge Current Characteristics



Reverse Recovery Time (t_{rr}) Measurement Circuit