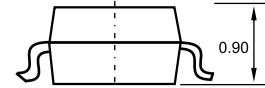
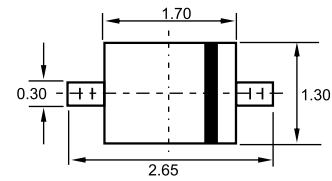



SOD-323


Dimensions in inches and (millimeters)

Features

- ✧ Extremely Fast Switching Speed
- ✧ Low forward voltage

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

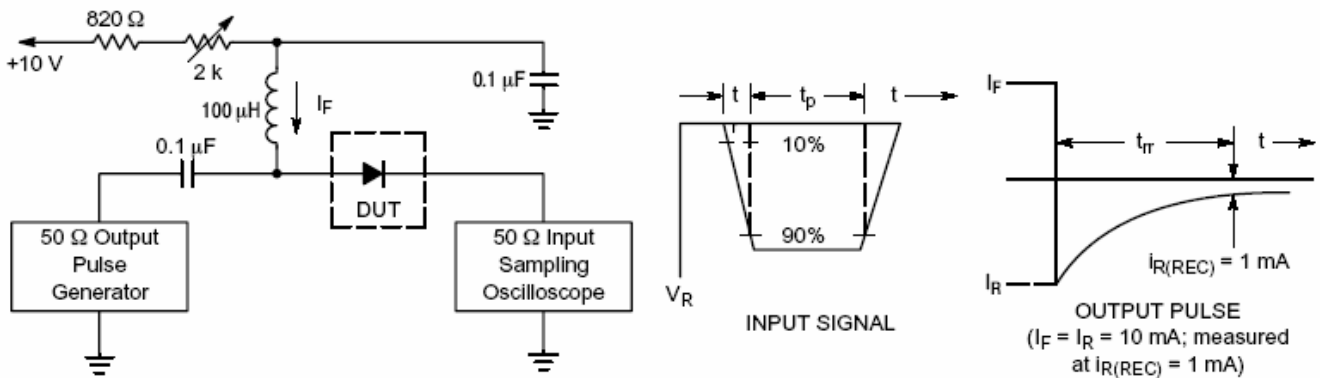
Maximum Ratings

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	30	V
DC Blocking Voltage	V_R	21	V
Average Rectified Output Current	I_O	100	mA
Forward continuous Current	I_F	200	mA
Repetitive peak Forward Current	I_{FRM}	300	mA
Forward Surge Current	I_{FSM}	600	mA
Power Dissipation	P_d	200	mW
Thermal resistance, junction to ambient air	$R_{\theta JA}$	625	°C/W
Junction temperature	T_J	125	°C
Storage temperature range	T_{STG}	-65-150	°C

Electrical Characteristics @ $T_A=25^\circ\text{C}$

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=100\mu\text{A}$	30			V
Forward voltage	V_{F1}	$I_F=0.1\text{mA}$			240	mV
	V_{F2}	$I_F=1.0\text{mA}$			320	mV
	V_{F3}	$I_F=10\text{mA}$			400	mV
	V_{F4}	$I_F=30\text{mA}$			500	mV
	V_{F5}	$I_F=100\text{mA}$			1000	mV
Reverse current	I_R	$V_R=25\text{V}$			2.0	μA
Reverse recovery time	t_{rr}	$I_F=10\text{mA}$, $I_R=10\text{mA}$ to 1mA , $R_L=100\Omega$			5.0	ns
Capacitance between terminals	C_T	$V_R=1\text{V}$, $f=1\text{MHz}$			10	pF

Typical Characteristics



- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
 2. Input pulse is adjusted so $I_{R(\text{peak})}$ is equal to 10 mA.
 3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

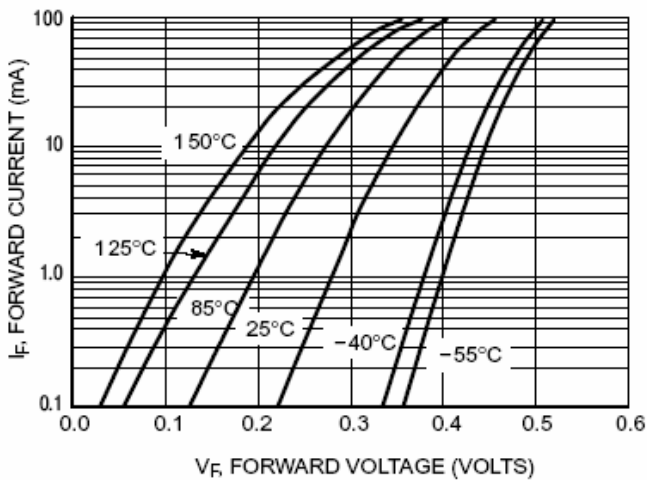


Figure 2. Forward Voltage

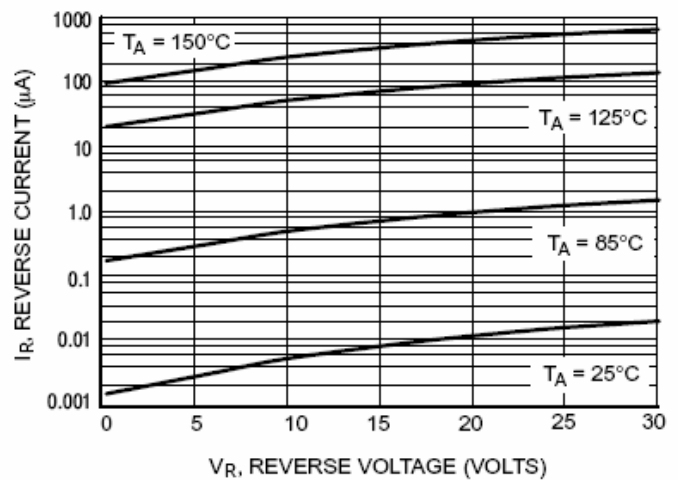


Figure 3. Leakage Current

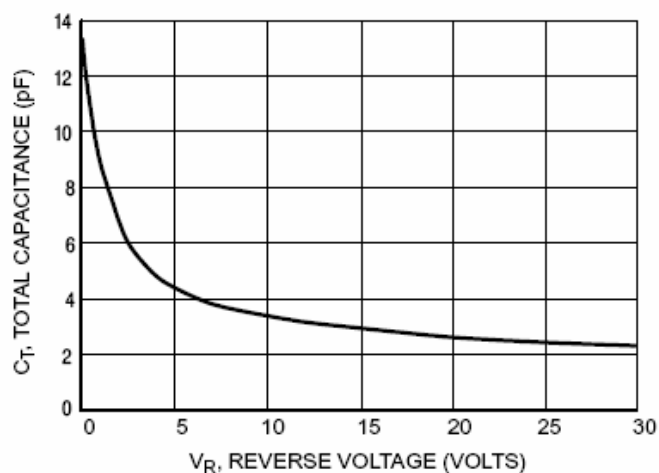


Figure 4. Total Capacitance