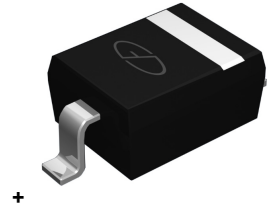


Features

- Fast switching speed ($T_{RR} < 50 \text{ nS}$)
- High Stability and High reliability
- Low reverse leakage



Schematic Diagram



SOD-323

Absolute Maximum Ratings

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

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	250	V
Peak Repetitive Reverse Vspoltage	V_{RRM}	250	V
Power Dissipation	P_D	200	mW
Average Rectified Current	I_O	200	mA
Peak Forward Surge Current@ $t_p=1\mu\text{s}$; $T_A=25^\circ\text{C}$	I_{FSM}	20	A
Operating Junction Temperature	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	635	$^\circ\text{C/W}$

Electrical Characteristics

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

Parameter	Symbol	Test Condition	Min	Max	Unit
Reverse Voltage	V_{BR}	$I_R=100\mu\text{A}$	250	---	V
Reverse Leakage Current	I_R	$V_R=200\text{V}$	---	100	nA
Forward Voltage	V_F	$I_F=100\text{mA}$	---	1.0	V
		$I_F=200\text{mA}$	---	1.25	
Reverse Recovery Time	T_{RR}	$I_F=I_R=30\text{mA}$, $R_L=100\Omega$	---	50	nS
Capacitance	C_D	$V_R=0\text{V}$, $f=1\text{MHZ}$	---	5	pF

Typical Electrical Characteristic Curves

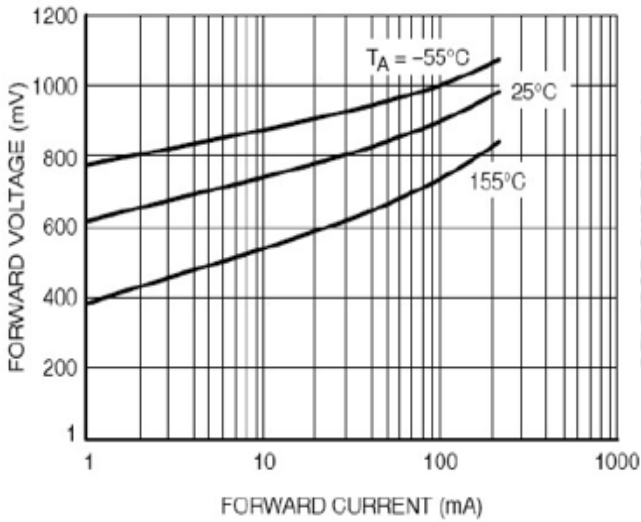


Figure 1. Forward Voltage

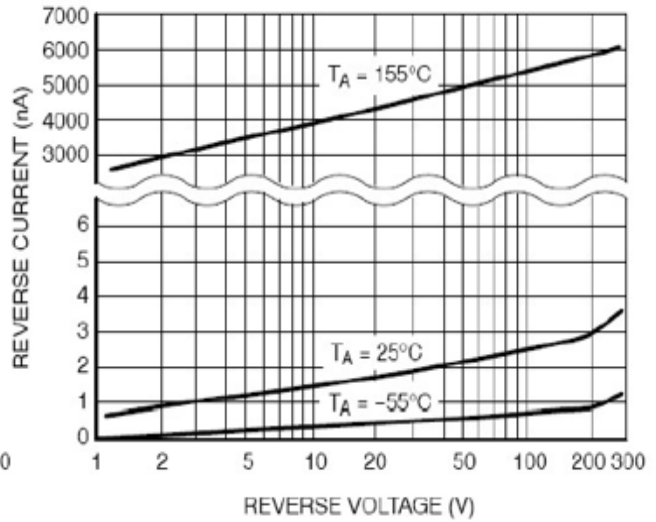


Figure 2. Reverse Leakage

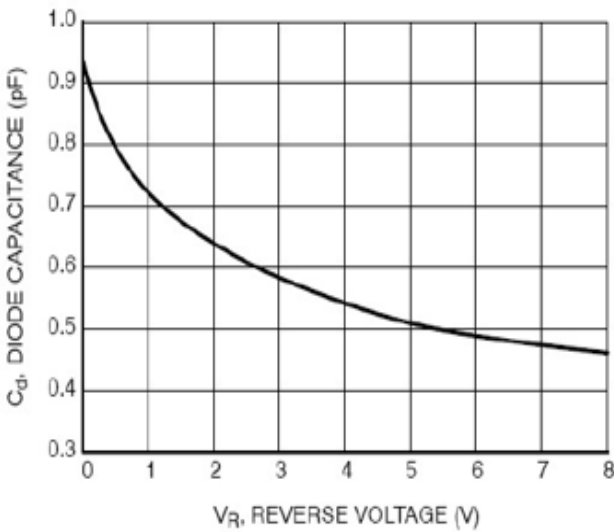


Figure 3. Diode Capacitance

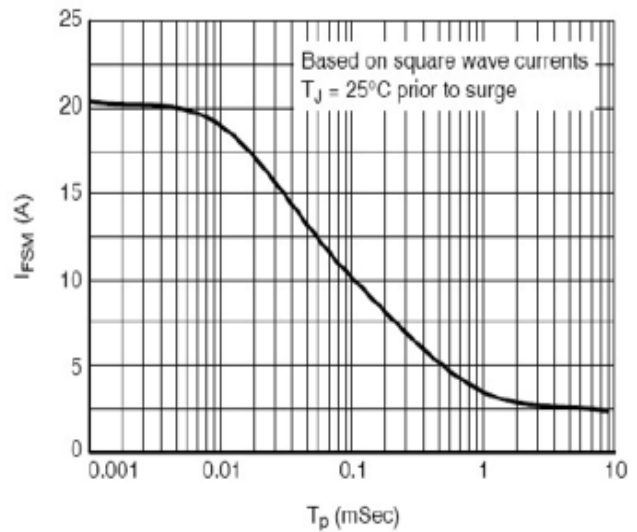
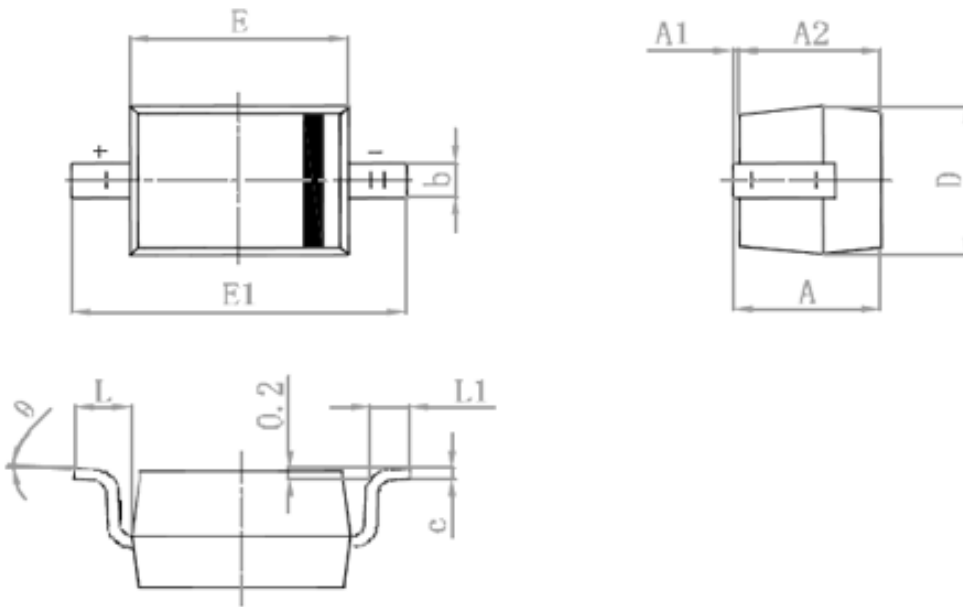


Figure 4. Maximum Non-Repetitive Peak Forward Current as a Function of Pulse Duration, Typical Values

Package Outline Dimensions SOD-323



Symbol	Min.(mm)	Max.(mm)
A	-	1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°