

**Features**

- Low forward voltage drop
- Guard ring construction for transient protection
- Negligible reverse recovery time
- Low reverse capacitance



SOD-323



Schematic Diagram

**Absolute Maximum Ratings**

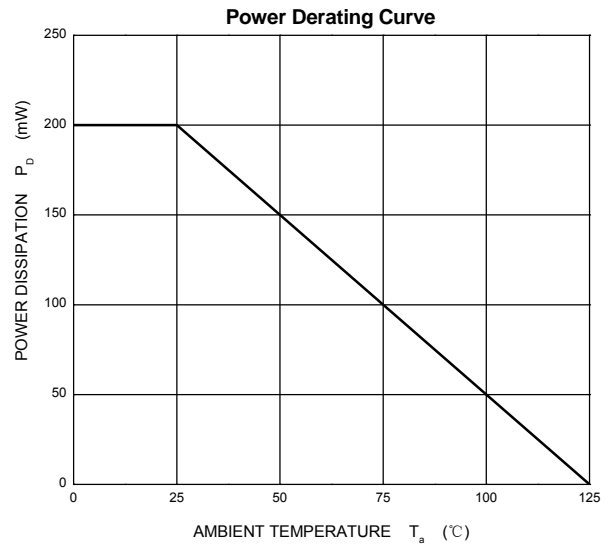
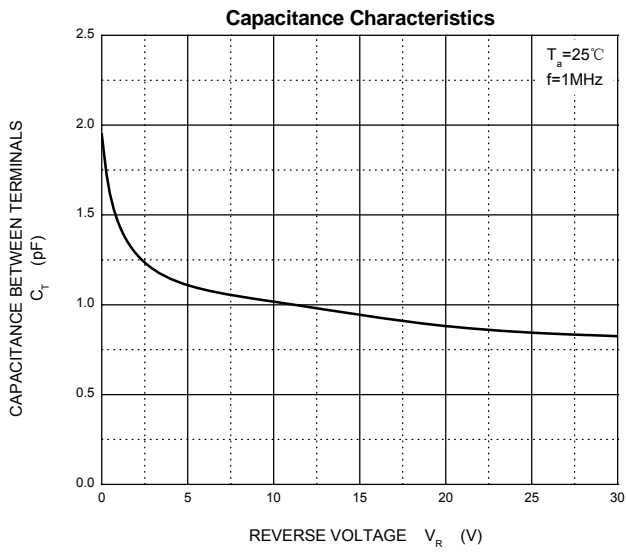
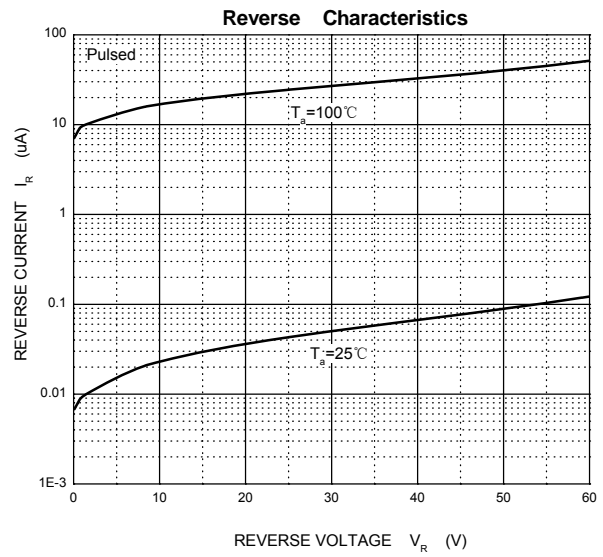
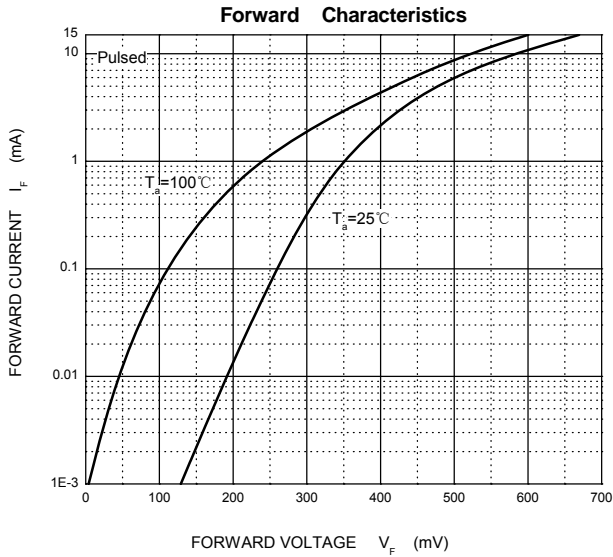
( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	60	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS reverse Voltage	$V_{R(RMS)}$	42	V
Forward Continuous Current	$I_{FM}$	15	mA
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	2	A
Power Dissipation	$P_D$	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	$^{\circ}\text{C}/\text{W}$
Junction Temperature	$T_j$	125	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-50 to +150	$^{\circ}\text{C}$

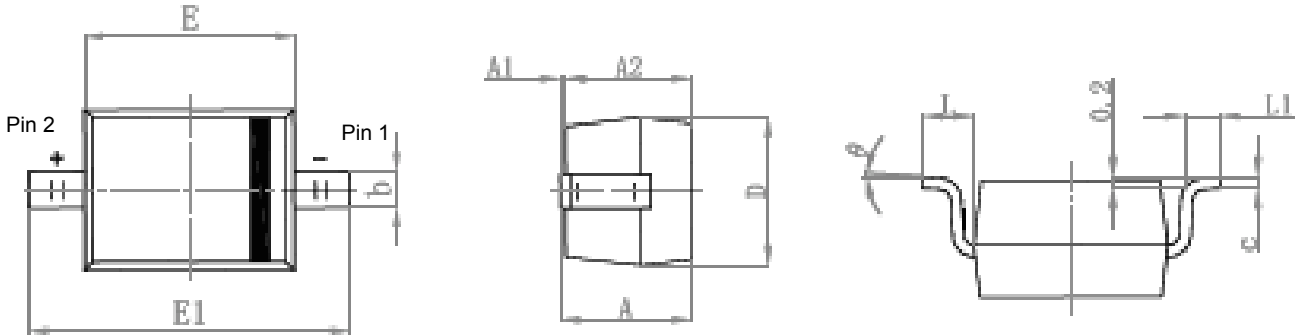
**Electrical Characteristics** ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse Voltage	$V_{(BR)}$	$I_R=10\mu\text{A}$	60	-	V
Reverse Current	$I_R$	$V_R=50\text{V}$	-	0.2	$\mu\text{A}$
Forward Voltage	$V_F$	$I_F=1\text{mA}$	-	0.41	V
		$I_F=15\text{mA}$	-	1	
Total Capacitance	$C_{tot}$	$V_R=0\text{V}, f=1\text{MHz}$	-	2	pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=5\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$	-	1	ns

**Typical Characteristic Curves**



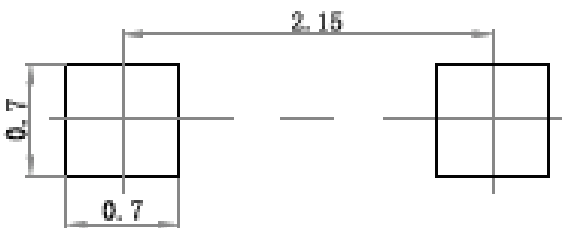
**Package Outline Dimensions SOD-323**



Pin 1 = Cathode  
 Pin 2 = Anode  
 Marking bar indicates the cathode.

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

**Suggested Pad Layout**



**Note:**  
 1. Controlling dimension: in millimeters.  
 2. General tolerance: ± 0.05mm.  
 3. The pad layout is for reference purposes only.

For more information, please contact us at: [inquiry@goodarksemi.com](mailto:inquiry@goodarksemi.com)