



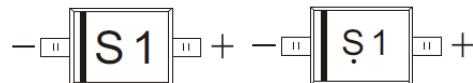
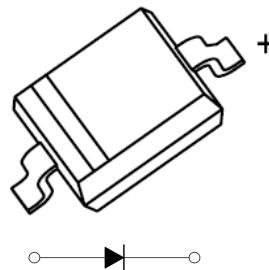
## SCHOTTKY BARRIER DIODE

## FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Very Low Reverse Capacitance

## MARKING: S1

SOD-323



The marking bar indicates the cathode  
Solid dot = Green molding compound device, if none,  
the normal device.

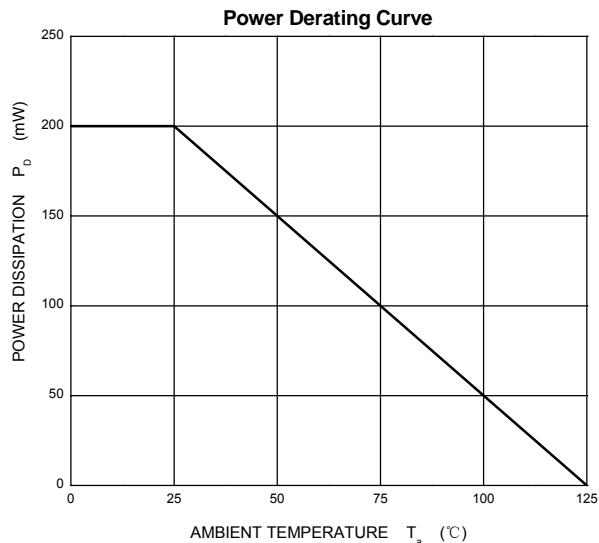
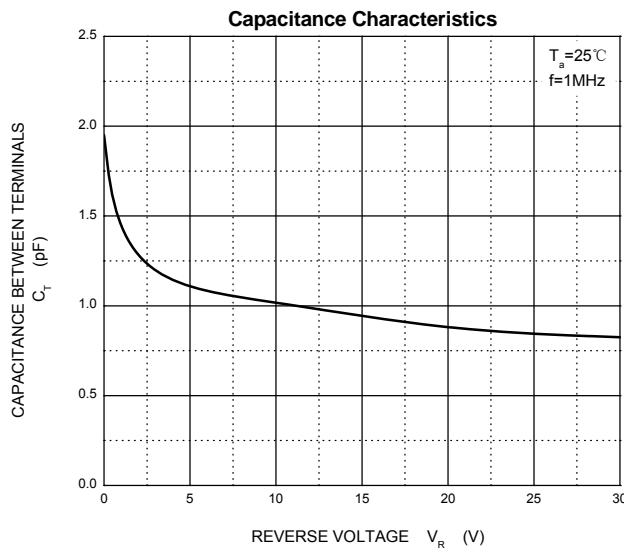
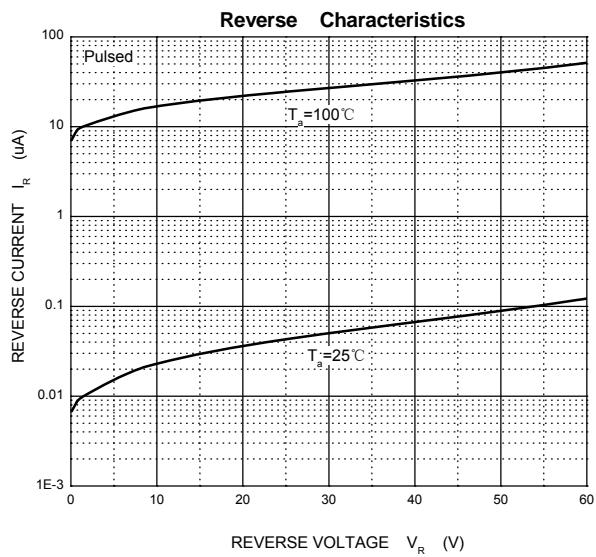
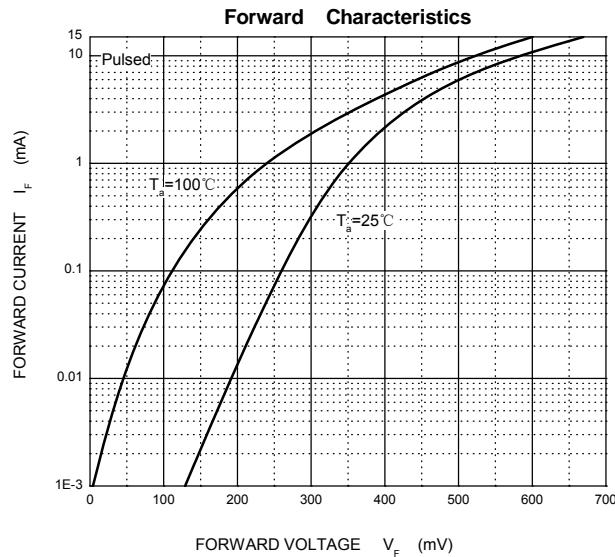
MAXIMUM RATINGS (  $T_A=25^\circ\text{C}$  unless otherwise noted )

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

ELECTRICAL CHARACTERISTICS( $T_a=25^\circ\text{C}$  unless otherwise specified)

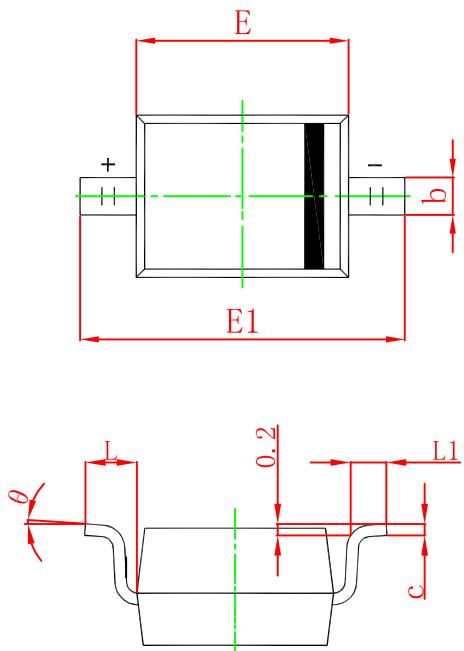
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=10\mu\text{A}$	60			V
Reverse current	$I_R$	$V_R=50\text{V}$			0.2	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=1\text{mA}$			0.41	V
		$I_F=15\text{mA}$			1	
Total capacitance	$C_{tot}$	$V_R=0\text{V}, f=1\text{MHz}$			2	pF
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 Characteristics



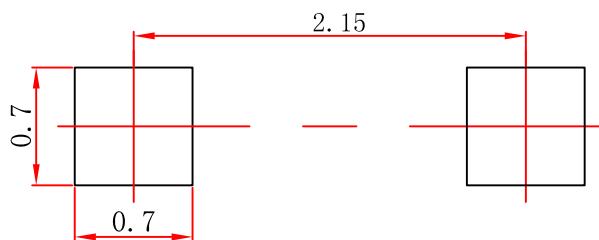


## SOD-323 Package Outline Dimensions



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°

## SOD-323 Suggested Pad Layout

**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.