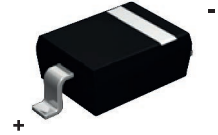


## Features

- Low forward voltage drop
- Guard ring die construction for transient protection
- Ideal for low logic level applications
- Low capacitance



SOD-323



Schematic Diagram

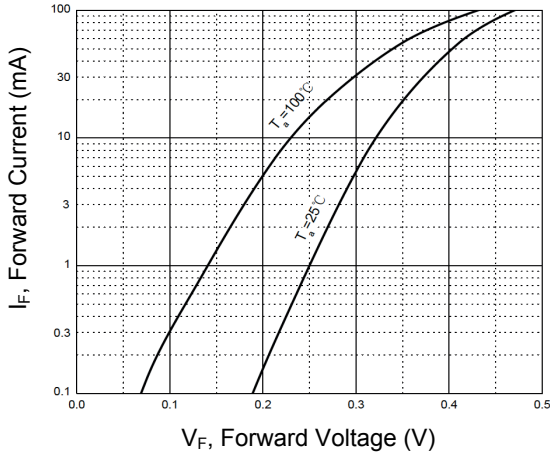
## Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	30	V
Forward Current	I <sub>FM</sub>	100	mA
Non-Repetitive Peak Forward Surge Current @ t=8.3ms	I <sub>FSM</sub>	2	A
Power Dissipation (T <sub>C</sub> =25°C)	P <sub>tot</sub>	250	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	400	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-40 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

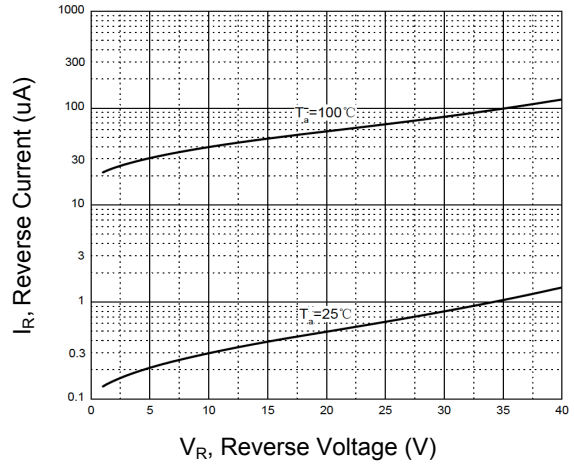
## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V <sub>R</sub>	I <sub>R</sub> =100μA	30	-	-	V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =2mA	-	300	-	mV
		I <sub>F</sub> =15mA	-	360	-	
		I <sub>F</sub> =50mA	-	430	550	
		I <sub>F</sub> =100mA	-	500	800	
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =25V	-	-	1	μA
Capacitance Between Terminals	C <sub>T</sub>	V <sub>R</sub> =10V, f=1MHz	-	7	-	pF

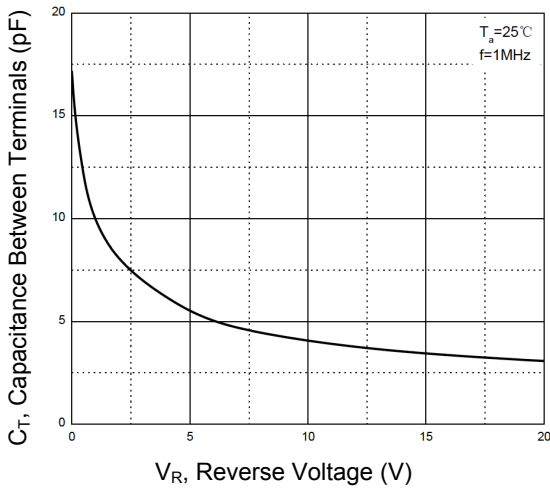
**Typical Characteristics Curves**



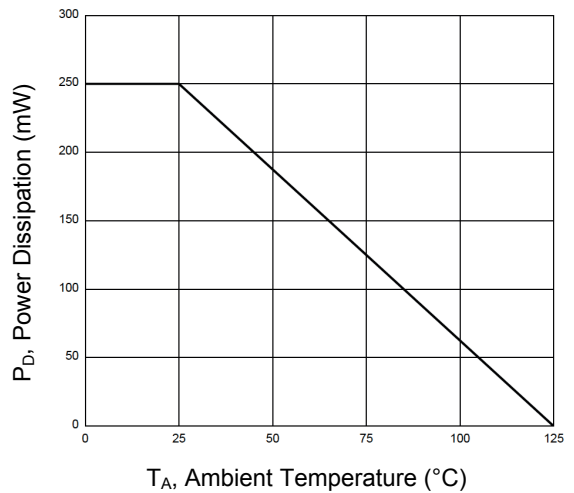
**Figure 1. Forward Characteristics**



**Figure 2. Reverse Characteristics**

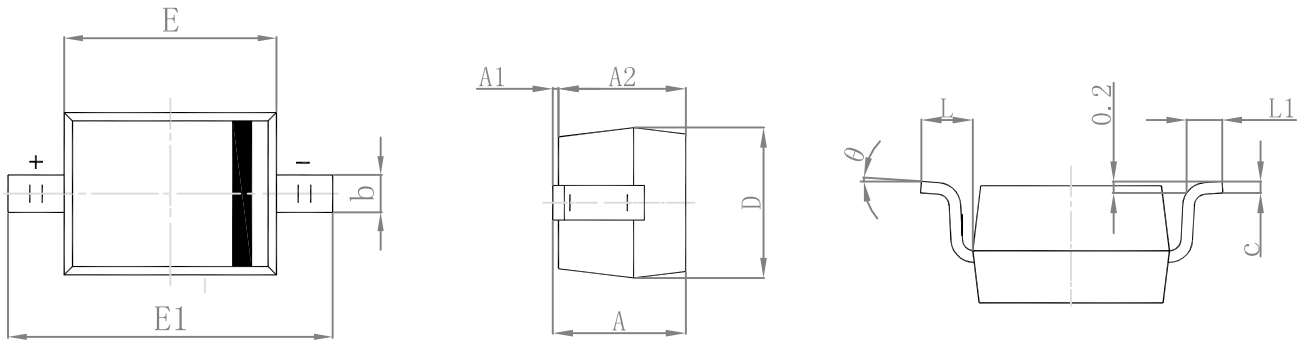


**Figure 3. Capacitance Characteristics**



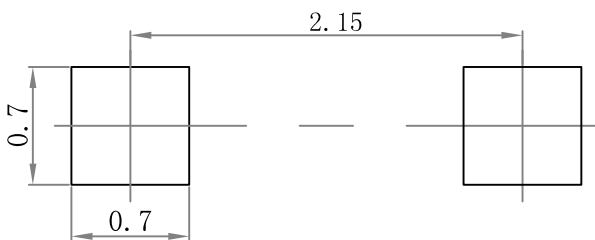
**Figure 4. Power Derating Curve**

**Package Outline Dimensions (SOD-323)**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	-	1.100	-	0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
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	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

**Recommended 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.

**Order Information**

Device	Package	Marking	Carrier	Quantity
GSD107WS	SOD-323	SG	Tape & Reel	3,000 Pcs / Reel