

### Features

- Low forward voltage schottky rectifier
- RoHS compliant / Green EMC
- SOD-323 thin SMD package
- Matte Tin (Sn) lead finish
- Cathode band / device marking



SOD-323



Schematic Diagram

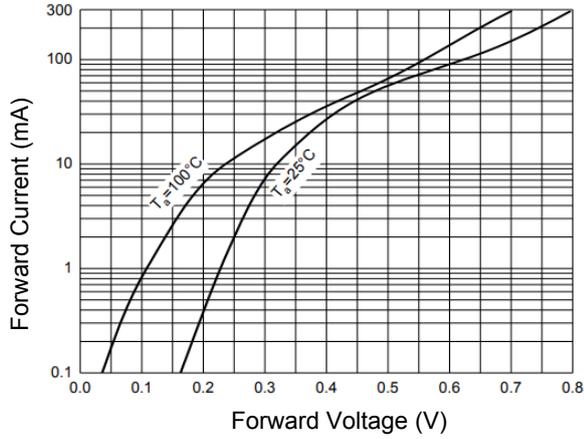
### Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	100	V
Forward Continuous Current	I <sub>F</sub>	150	mA
Repetitive Peak Forward Current <sup>1</sup> @ tp < 1.0s, Duty Cycle < 50%	I <sub>FRM</sub>	350	mA
Non-Repetitive Peak Forward Surge Current @ t=8.3ms	I <sub>FSM</sub>	750	mA
Power Dissipation	P <sub>D</sub>	200	mW
Thermal Resistance, Junction-to-Ambient Air	R <sub>θJA</sub>	500	°C/W
Operating Junction Temperature	T <sub>J</sub>	125	°C
Storage Temperature Range	T <sub>STG</sub>	-65 To +125	°C

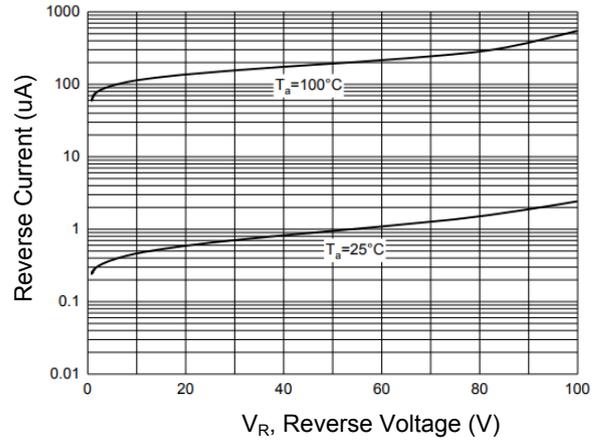
### Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> =100μA	100	-	-	V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =0.1mA	-	-	250	mV
		I <sub>F</sub> =10mA	-	-	450	
		I <sub>F</sub> =250mA	-	-	1000	
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =1.5V	-	-	0.3	uA
		V <sub>R</sub> =10V	-	-	0.5	
		V <sub>R</sub> =50V	-	-	1	
		V <sub>R</sub> =75V	-	-	2	
Diode Capacitance	C <sub>T</sub>	V <sub>R</sub> =0V, f=1MHz	-	20	-	pF
		V <sub>R</sub> =1V, f=1MHz	-	12	-	

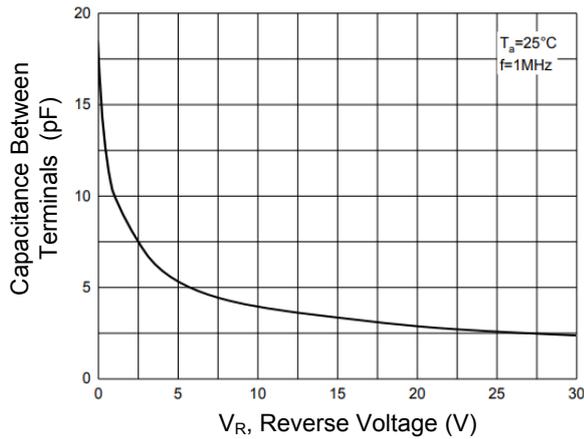
**Typical Characteristic Curves**



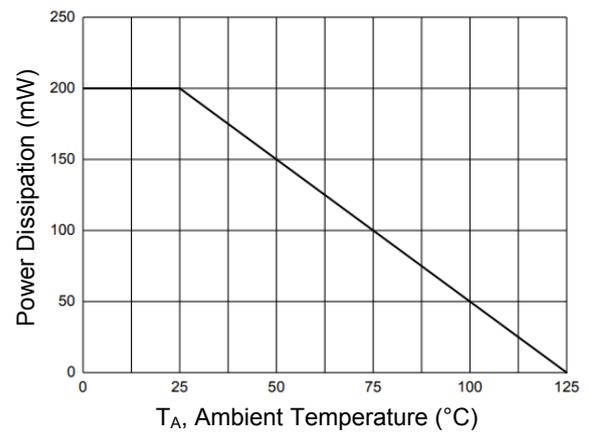
**Figure 1. Forward Characteristics**



**Figure 2. Reverse Characteristics**

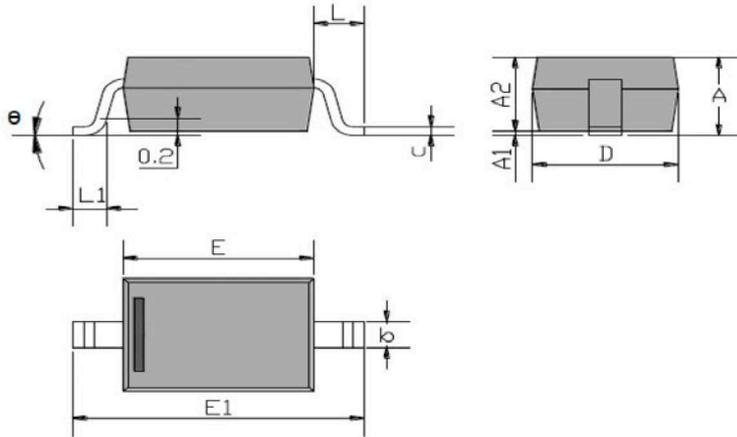


**Figure 3. Capacitance Characteristics**



**Figure 4. Power Derating Curve**

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



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.800	1.000	0.031	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	2.500	2.700	0.098	0.106
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

**Order Information**

Device	Package	Marking	Carrier	Quantity
GSBAT46WS	SOD-323	S9	Tape & Reel	3,000 pcs / 7" Reel