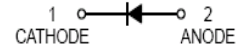
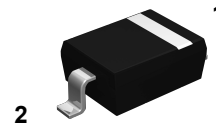


Features

- High current capability
- Low forward voltage drop

Mechanical Data

- Case: SOD-323 small outline plastic package
- Polarity: Color band denotes cathode end
- Mounting position: Any



Package: SOD-323

Schematic Diagram

Absolute Maximum Ratings (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	GSD103AWS	GSD103BWS	GSD103CWS	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	30	20	V
Maximum RMS Voltage	V_{RMS}	28	21	14	V
Maximum DC Blocking Voltage	V_{DC}	40	30	20	V
Maximum Average Forward Rectified Current	I_{FM}	350			mA
Peak Forward Surge Current 8.3ms Single Half Sine-Wave	I_{FSM}	1.5			A
Power Dissipation	P_D	200			mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500			°C/W
Operating Junction Temperature	T_J	125			°C
Storage Temperature Range	T_{STG}	-50 to +150			°C

Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Test conditions	GSD103AWS	GSD103BWS	GSD103CWS	Unit
Maximum Forward Voltage	V_F	$I_F=20mA$	0.37			V
		$I_F=200mA$	0.60			
Maximum Reverse Breakdown Voltage	V_R	$I_R=100\mu A$	40	30	20	V
Maximum Reverse Current	I_R	$V_R=30V, (GSD103AWS)$ $V_R=20V, (GSD103BWS)$ $V_R=10V, (GSD103CWS)$	5.0			μA
Typical Junction Capacitance	C_J	$V_R=0V, F=1MHz$	50			pF
Reverse Recovery Time	T_{rr}	$I_F=I_R=200mA,$ $I_{rr}=0.1I_R, R_L=100\Omega$	10			ns

Typical Characteristic Curves

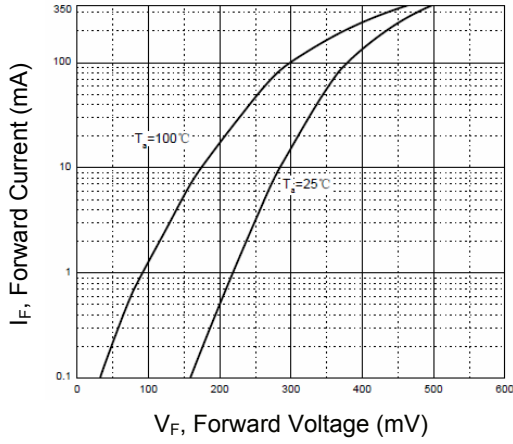


Figure 1. Forward Characteristics

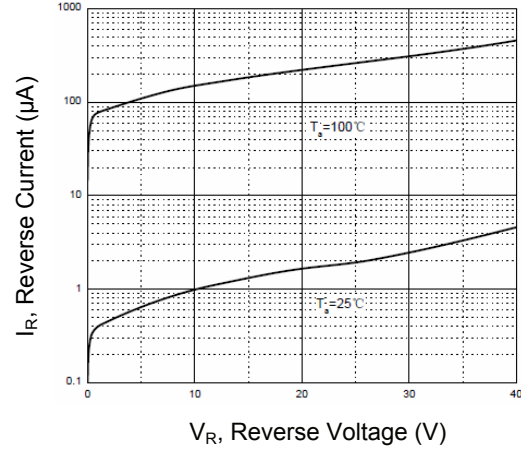


Figure 2. Reverse Characteristics

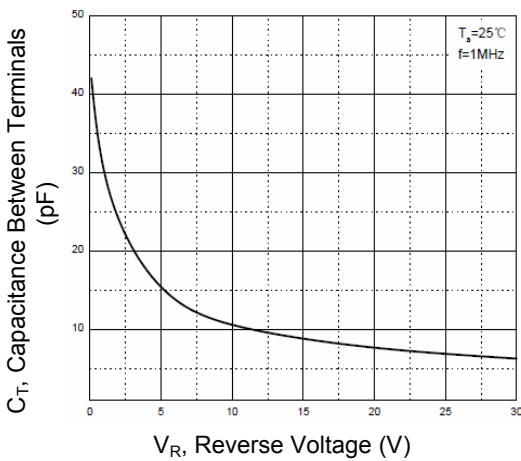


Figure 3. Capacitance Characteristics

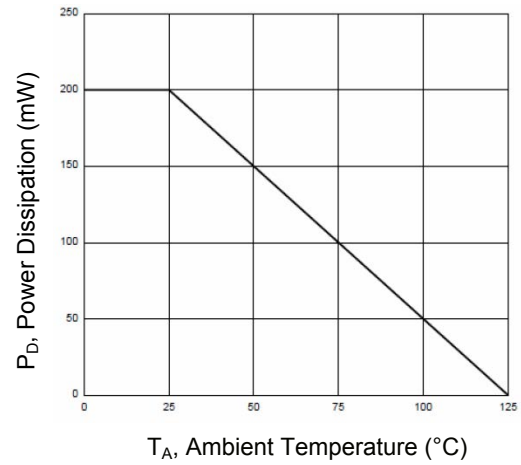
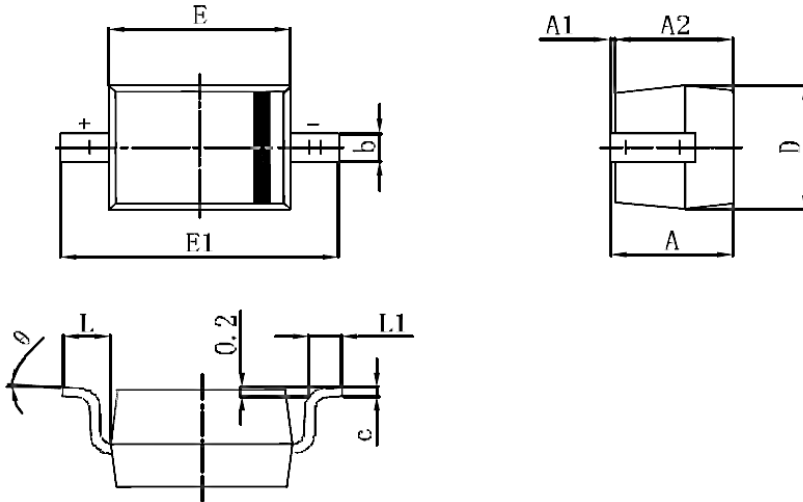


Figure 4. Power Derating Curve

Package Outline Dimensions (SOD-323)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	-	1.000	-	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	2.500	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
GSD103AWS	SOD-323	S4	Tape & Reel	3,000pcs / Reel
GSD103BWS	SOD-323	S5	Tape & Reel	3,000pcs / Reel
GSD103CWS	SOD-323	S6	Tape & Reel	3,000pcs / Reel