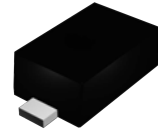


Features

- Small surface mounting type
- Low reverse current
- Low forward voltage
- High reliability



SOD-523



Schematic Diagram

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
DC Blocking Voltage	V_R	30	V
Continuous Forward Current	I_O	200	mA
Non-Repetitive Peak Forward Current ¹	I_{FSM}	1	A
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	125	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to +125	$^{\circ}\text{C}$

Note:

1. 8.3ms single half sine-wave.

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

Parameter	Symbol	Conditions	Min	Max	Units
Forward Voltage	V_F	$I_F=10\text{mA}$	-	0.4	V
		$I_F=200\text{mA}$	-	0.6	
Breakdown Voltage	BV_R	$I_R=100\mu\text{A}$	30	-	V
Reverse Current	I_R	$V_R=10\text{V}$	-	1	μA

Typical Characteristic Curves

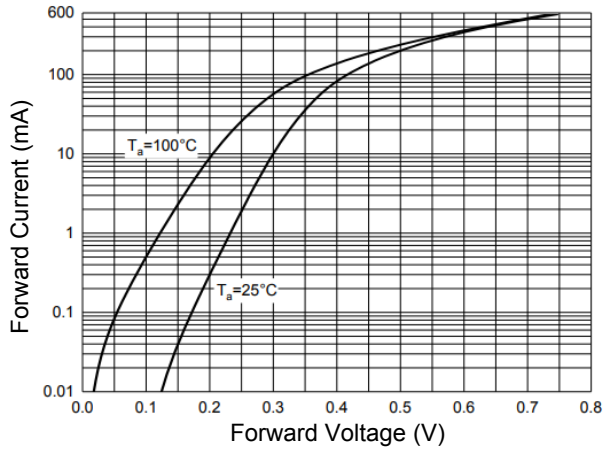


Figure 1. Forward Characteristics

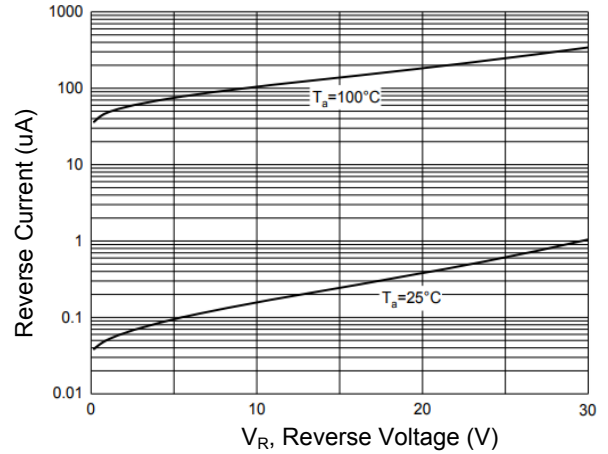


Figure 2. Reverse Characteristics

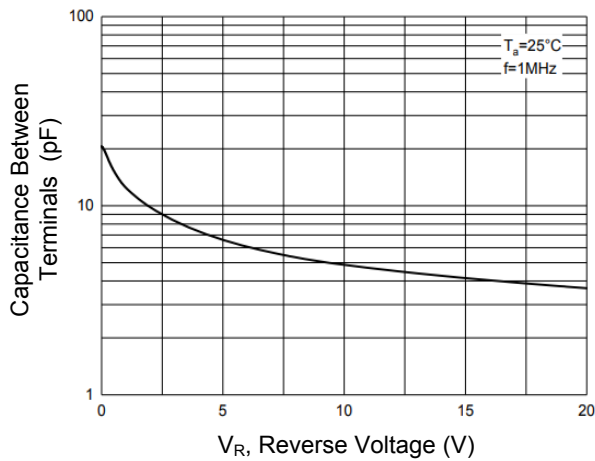


Figure 3. Capacitance Characteristics

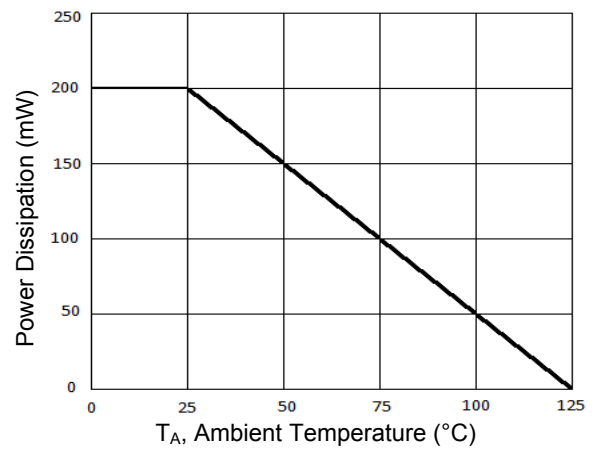
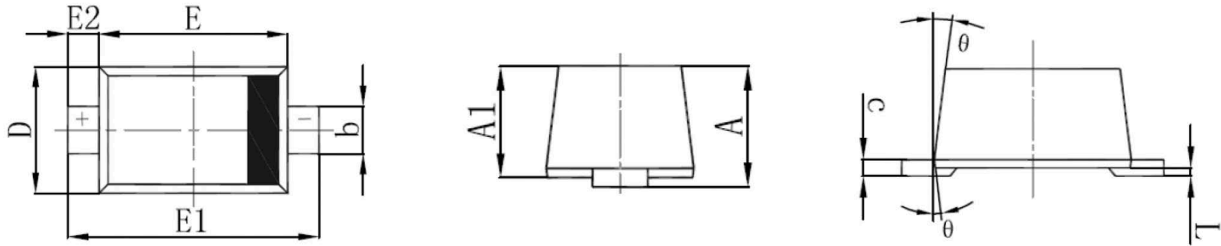


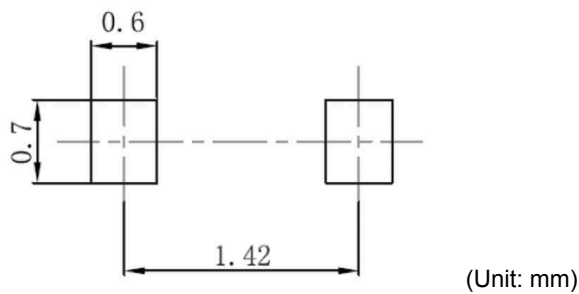
Figure 4. Power Derating Curve

Package Outline Dimension (SOD-523)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.150	0.250	0.006	0.010
L	0.010	0.070	0.000	0.003
θ	7° REF.		7° REF.	

Recommended Pad Layout



Order Information

Device	Package	Marking	Carrier	Quantity
GSRB520S-30	SOD-523	B	Tape & Reel	8,000 pcs / 7" Reel

For more information, please contact us at: inquiry@goodarksemi.com