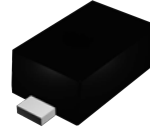


Features

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



SOD-523



Schematic Diagram

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

Parameter	Symbol	Value	Unit
DC Reverse Voltage	V_R	30	V
Mean Rectifying Current	I_o	200	mA
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	1	A
Power Dissipation	P_D	150	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	667	$^{\circ}\text{C/W}$
Junction Temperature	T_J	-40 to +125	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}\text{C}$

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

Parameter	Symbol	Test Condition	Max	Unit
Forward Voltage	V_{F1}	$I_F=10\text{mA}$	0.35	V
	V_{F2}	$I_F=200\text{mA}$	0.5	V
Reverse Current	I_R	$V_R=10\text{V}$	30	μA

Typical Characteristic Curves

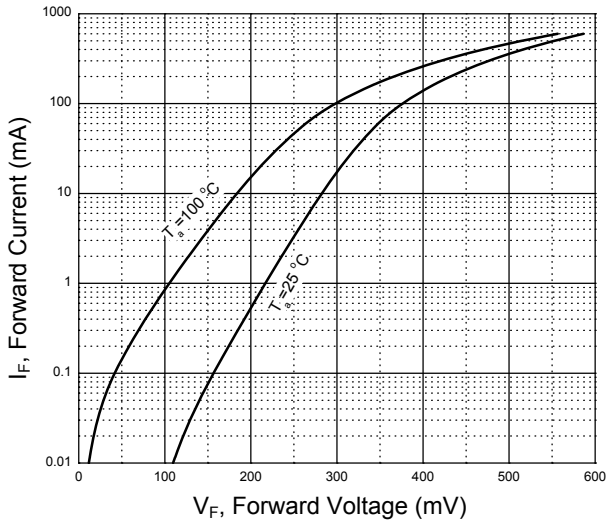


Figure 1. Forward Characteristics

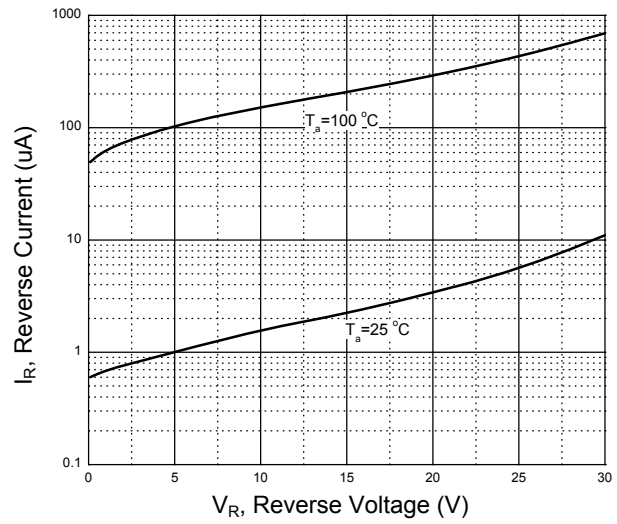


Figure 2. Reverse Characteristics

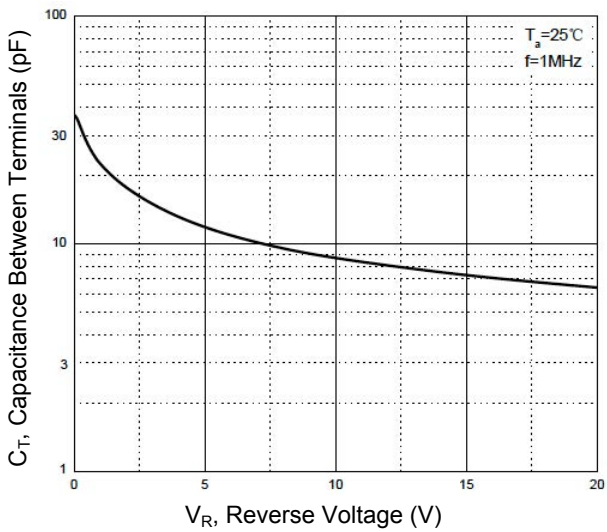


Figure 3. Capacitance Characteristics

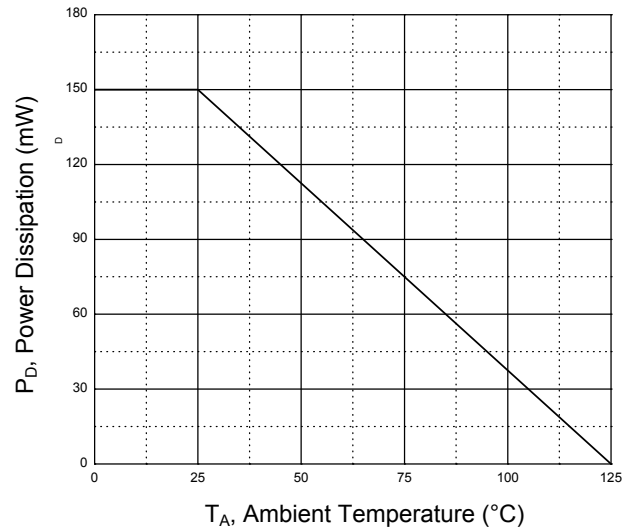
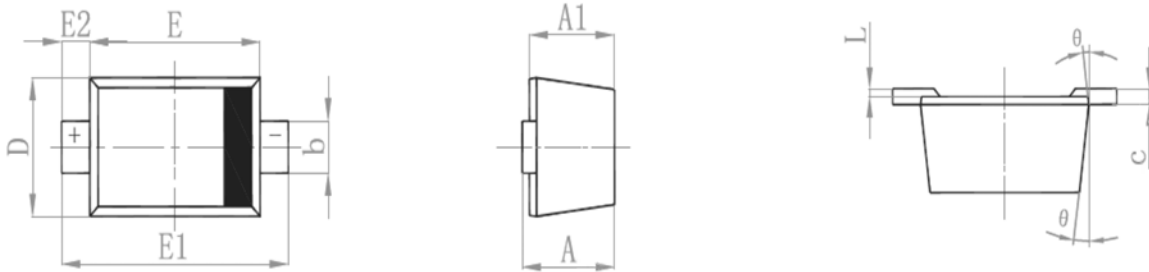


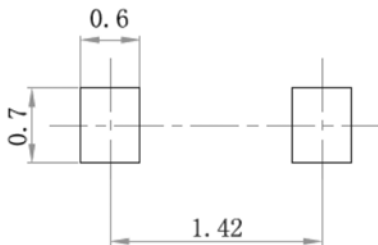
Figure 4. Power Derating Curve

Package Outline Dimensions (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	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

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.

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