

Features

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



SOD-523



Schematic Diagram

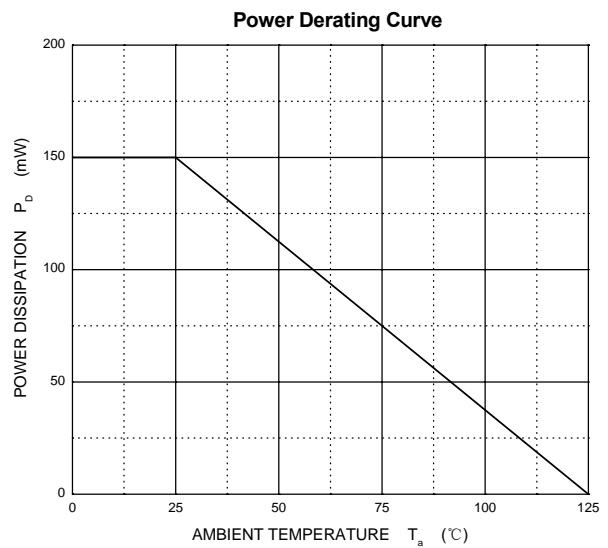
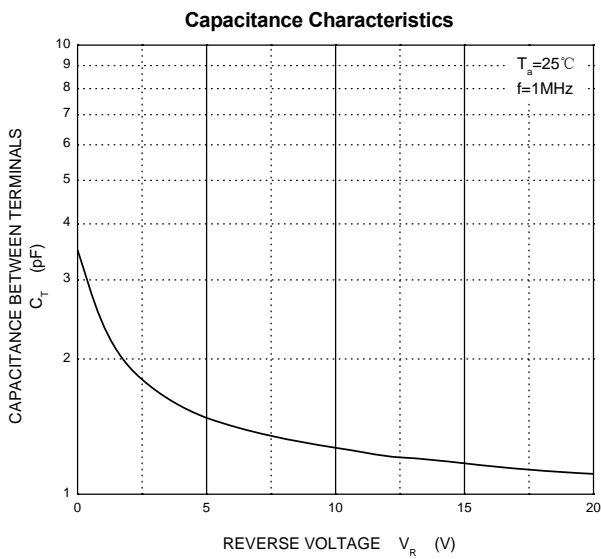
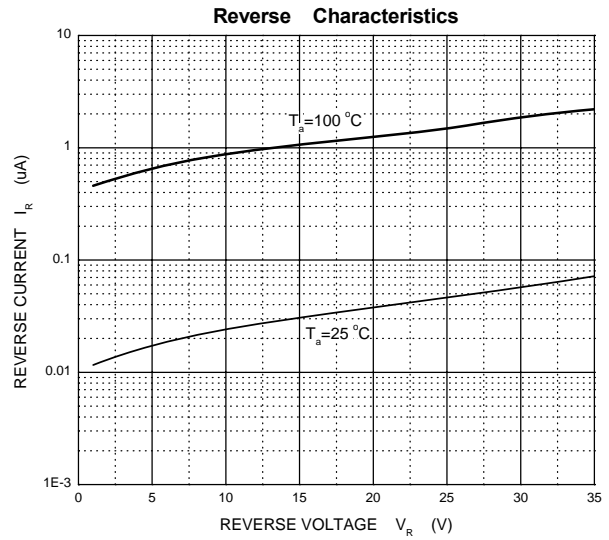
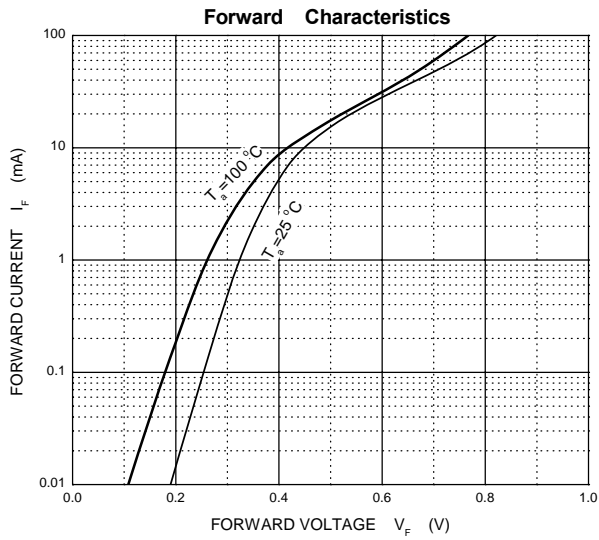
Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

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

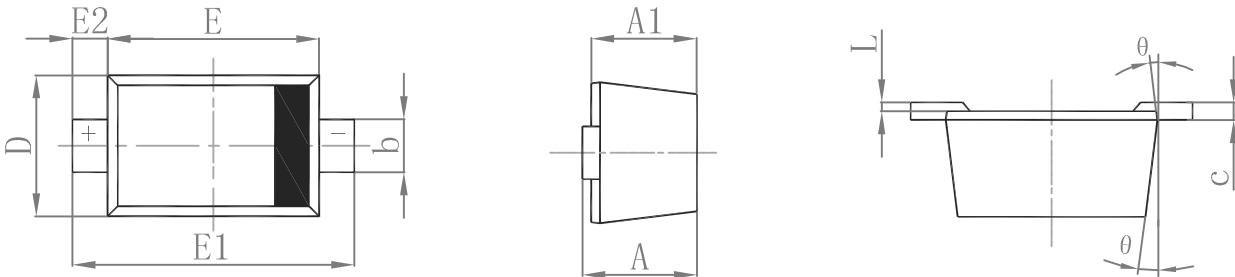
Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=1\text{mA}$	-	-	0.37	V
Reverse Current	I_R	$V_R=30\text{V}$	-	-	0.5	μA
Capacitance between Terminals	C_T	$V_R=1\text{V}, f=1\text{MHZ}$	-	2	-	pF

Typical Characteristic Curves

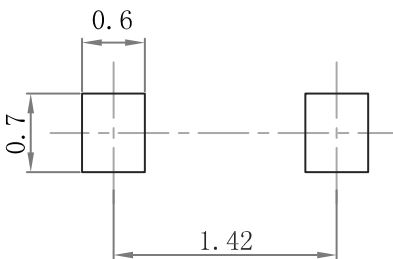


Package Outline Dimensions SOD-523



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	

Suggested 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	HSF Status
GSRB751S-40	SOD-523	5	Tape & Reel	8000pcs / Reel	RoHS compliant