

## Features

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



SOD-523



Schematic Diagram

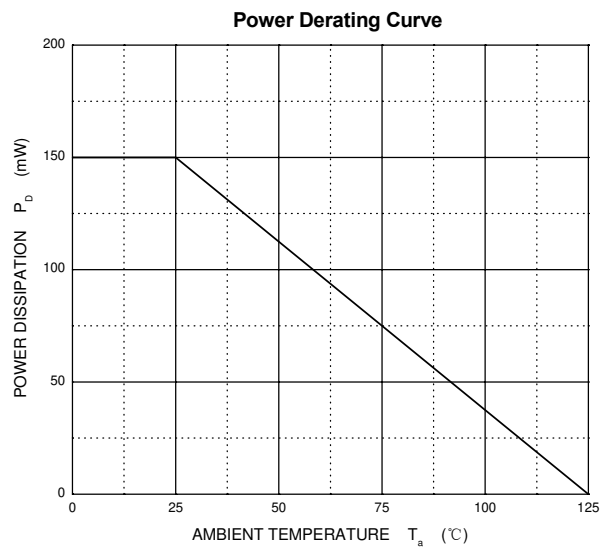
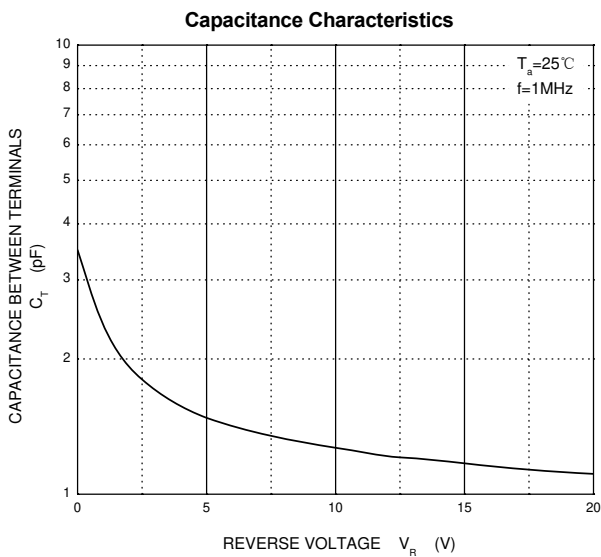
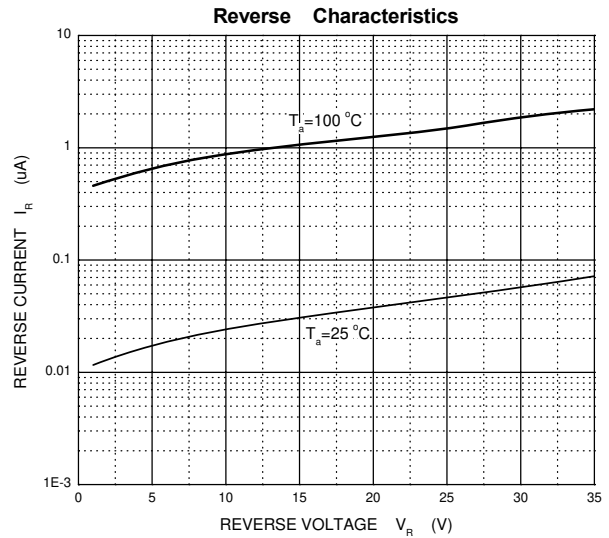
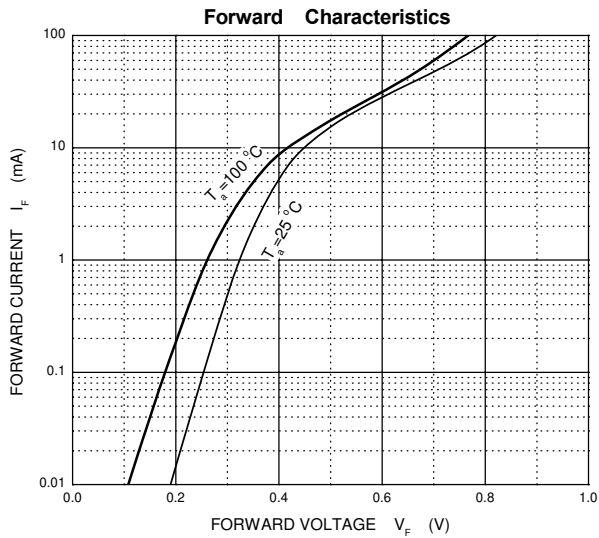
## Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Limit	Unit
Peak Reverse Voltage	V <sub>RM</sub>	40	V
DC Reverse Voltage	V <sub>R</sub>	30	V
Mean Rectifying Current	I <sub>O</sub>	30	mA
Non-Repetitive Peak Forward Surge Current@t=8.3ms	I <sub>FSM</sub>	200	mA
Power Dissipation	P <sub>D</sub>	150	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	667	°C/W
Junction Temperature	T <sub>J</sub>	125	°C
Storage Temperature	T <sub>STG</sub>	-55 to +150	°C

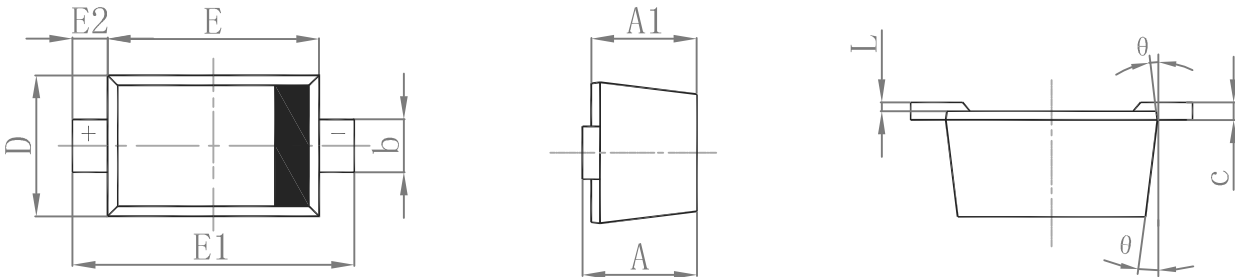
## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1mA	-	-	0.37	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =30V	-	-	0.5	μA
Capacitance between Terminals	C <sub>T</sub>	V <sub>R</sub> =1V,f=1MHZ	-	2	-	pF

**Typical Characteristic Curves**

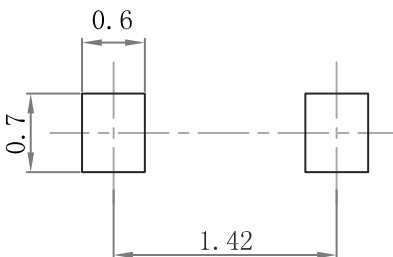


**Package Outline Dimensions SOD-523**



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	4B	Tape & Reel	8000pcs / Reel	RoHS compliant