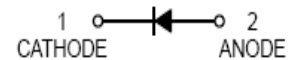


Features

- Low forward voltage drop
- Fast switching
- PN junction guard ring for transient and ESD protection



SOD-523



Schematic Diagram

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Limits	Unit
DC Reverse Voltage	V _R	30	V
Continuous Forward Current	I _F	200	mA
Peak Forward Surge Current	I _{FSM}	600	mA
Total Power Dissipation	P _{tot}	200	mW
Total Resistance Junction to Ambient	R _{θJA}	635	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55 to +150	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V _{(BR)R}	30			V	I _R =100μA
Forward Voltage	V _F		0.22 0.41 0.52 0.29 0.35	0.24 0.5 0.8 0.32 0.40	V	I _F =0.1mA I _F =30mA I _F =100mA I _F =1.0mA I _F =10mA
Reverse Current	I _R		0.5	2.0	μA	V _R =25V
Diode Capacitance	C _d		7.6	10	pF	V _R =1V, f=1MHz
Reverse Recovery Time	t _{rr}			5	ns	I _F =I _R =10mA

Typical Electrical Characteristic Curves

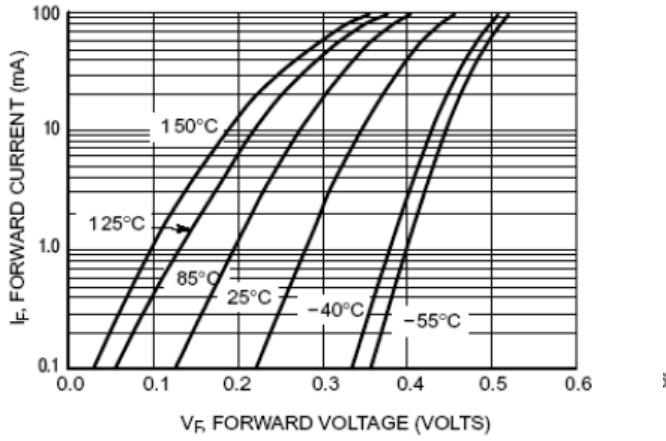


Figure 1. Forward Voltage

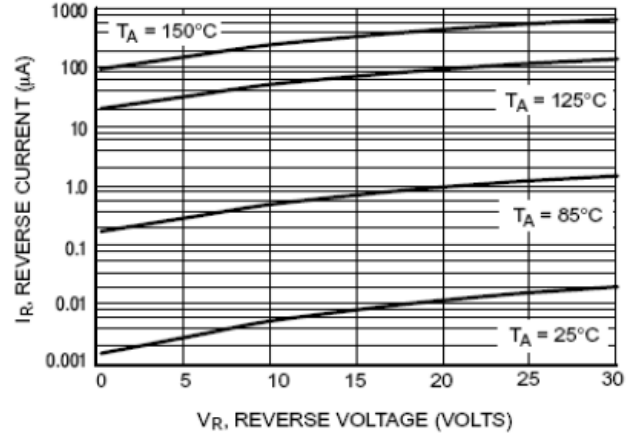


Figure 2. Leakage Current

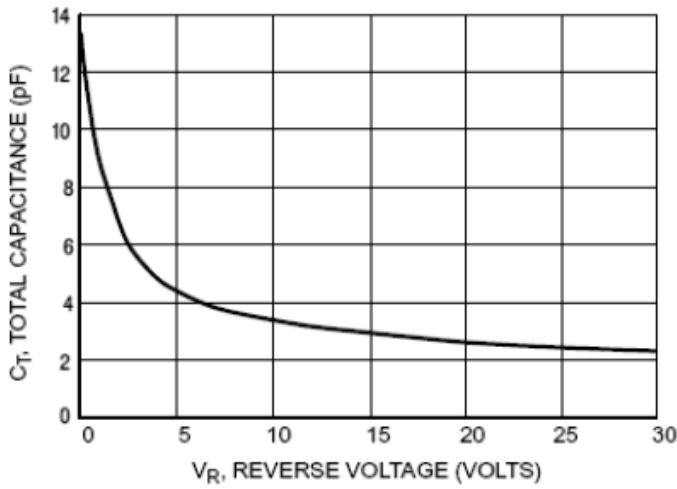
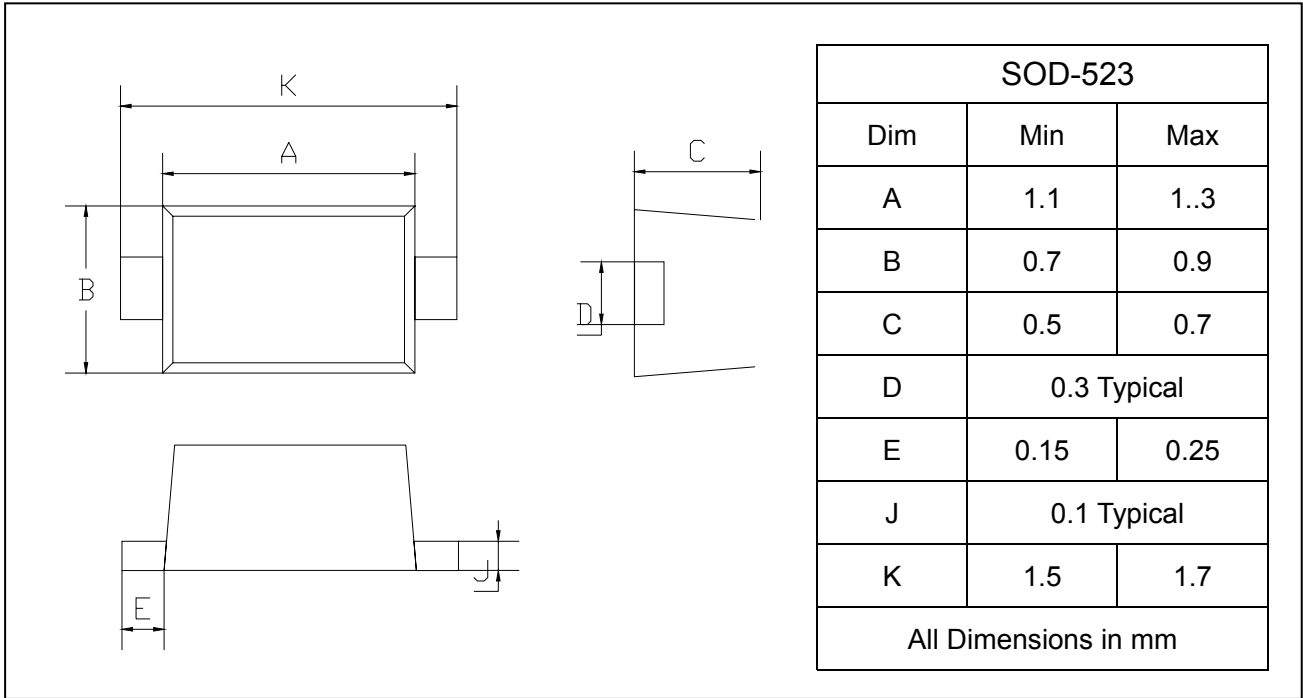


Figure 3. Total Capacitance

Package Outline Dimensions SOD-523



Marking and Ordering Information

Device	Package	Carrier	Quantity	Marking
GSBAT54X	SOD-523	Tape & Reel	8,000pcs / Reel	JV