

Surface Mount Switching Diodes

Pb Lead(Pb)-Free

Features:

- *Extremely High Switching Speed.
- *Low Reverse Leakage Current.
- *High Reliability.
- *Small Outline Surface Mount SOD-523 Package.

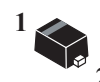
Applications:

- *High Speed Switching.

SWITCHING DIODE

100 mAMPERES

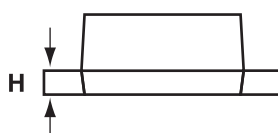
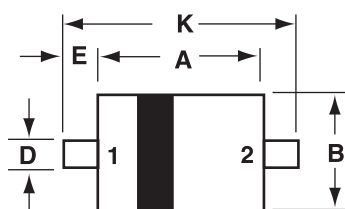
90 VOLTS



SOD-523

SOD-523 Outline Dimensions

Unit:mm



SOD-523		
Dim	Min	Max
A	1.10	1.30
B	0.70	0.90
C	0.50	0.70
D	0.25	0.35
H	0.16	0.24
J	0.11	0.13
K	1.50	1.70

PIN 1. CATHODE
2. ANODE

1SS400



Maximum Ratings (T_a=25°C Unless otherwise noted)

Characteristic	Symbol	Value	Unit
Peak Reverse Voltage	V _{RM}	90	Volts
DC Reverse Voltage	V _R	80	Volts
Average Rectifier Forward Current	I _{F(AV)}	100	mA
Peak Forward Surge Current @t=1S	I _{FSM}	500	mA
Operating Junction Temperature Range	T _J	125	°C
Storage Temperature Range	T _{stg}	-40 to +125	

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

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage (I _R =100μA)	V _{(BR)R}	80		Volts
Forward Voltage I _F =100mA	V _F		1.20	Volts
Reverse Leakage V _R =80V	I _R		0.1	μA _{dc}
Capacitance Between Terminals V _R =0.5V, f=1MHZ	C _T		3.0	PF
Reverse Recovery Time V _R =6V, I _F =10mA, R _L =100Ω	T _{rr}		4.0	ns

Device Marking

Item	Marking	Equivalent Circuit diagram
1SS400	A, 4	

Electrical characteristic curves ($T_a = 25^\circ\text{C}$)

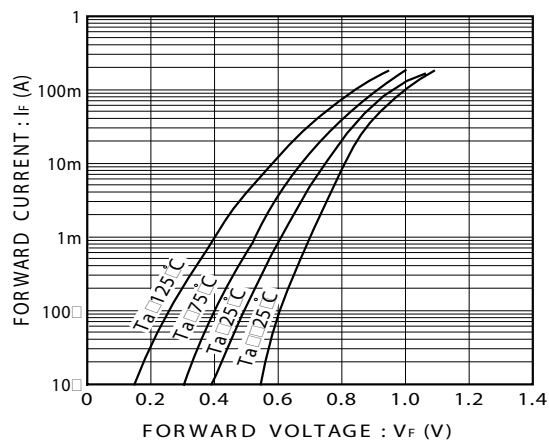


Fig.1 Forward characteristics

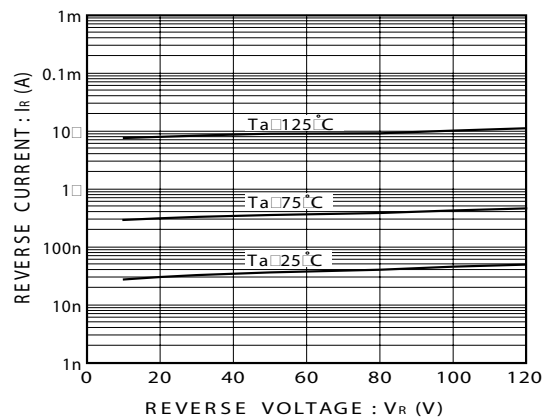


Fig.2 Reverse characteristics

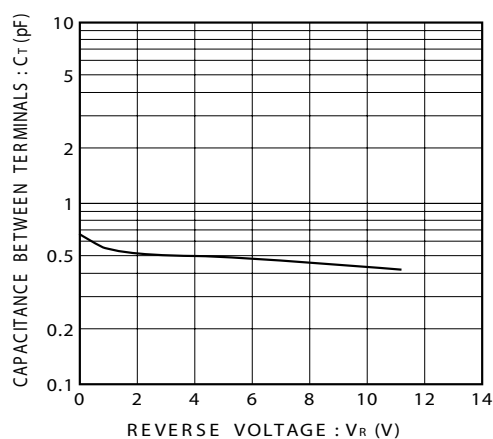


Fig.3 Capacitance between terminals

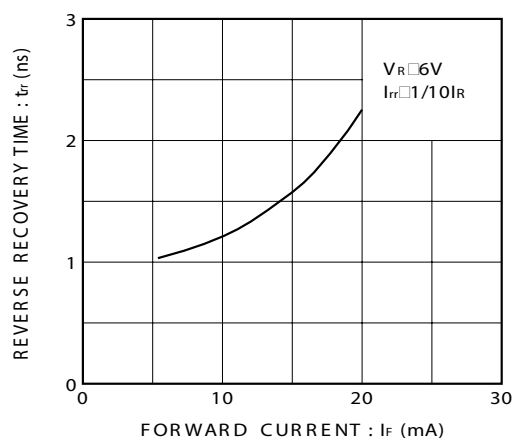


Fig.4 Reverse recovery time characteristics

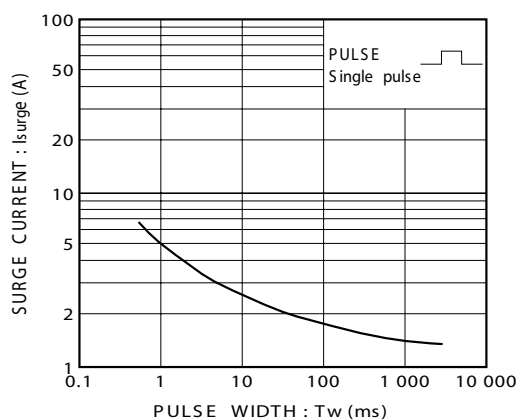


Fig.5 Surge current characteristics

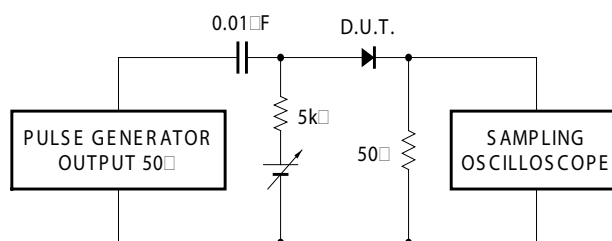


Fig.6 Reverse recovery time (t_r) measurement circuit