

QUNHAN TECH

1SS400

Surface Mount Switching Diodes

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

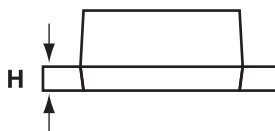
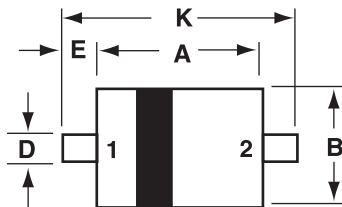
90 VOLTS



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

Maximum Ratings ($T_a=25^{\circ}\text{C}$ 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	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-40 to +125	

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

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage ($I_R=100\mu\text{A}$)	$V_{(BR)R}$	80		Volts
Forward Voltage $I_F=100\text{mA}$	V_F		1.20	Volts
Reverse Leakage $V_R=80\text{V}$	I_R		0.1	μA_{dc}
Capacitance Between Terminals $V_R=0.5\text{V}$, $f=1\text{MHZ}$	C_T		3.0	PF
Reverse Recovery Time $V_R=6\text{V}$, $I_F=10\text{mA}$, $R_L=100\Omega$	T_{rr}		4.0	ns

Device Marking

Item	Marking	Equivalent Circuit diagram
1SS400	A	

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

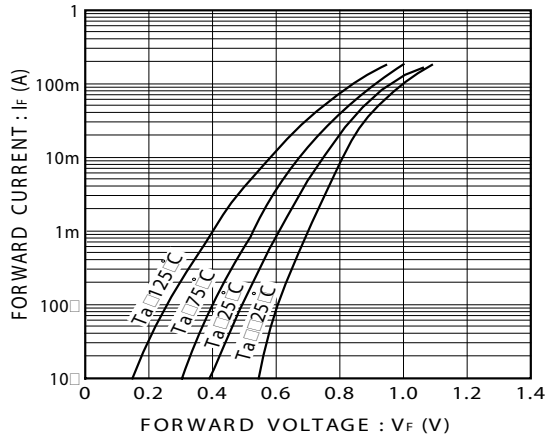


Fig.1 Forward characteristics

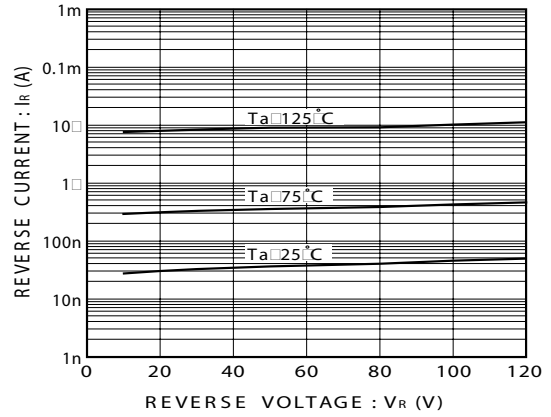


Fig.2 Reverse characteristics

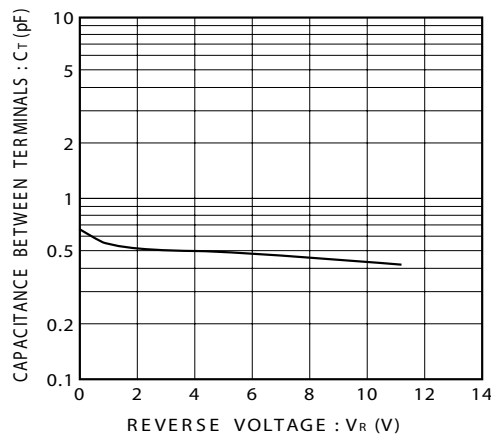


Fig.3 Capacitance between terminals

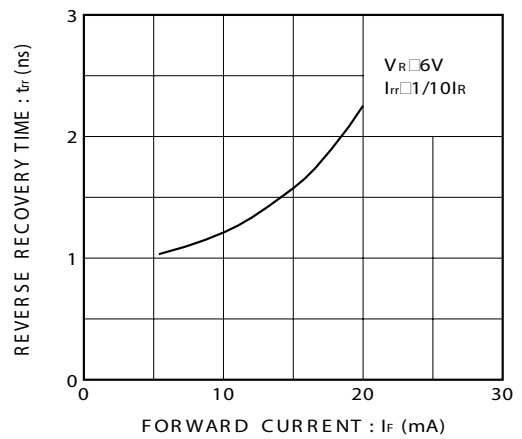


Fig.4 Reverse recovery time characteristics

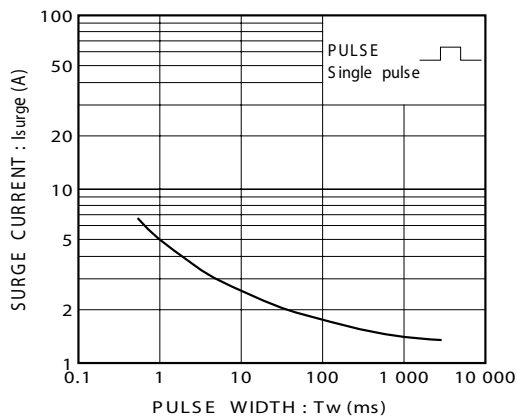


Fig.5 Surge current characteristics

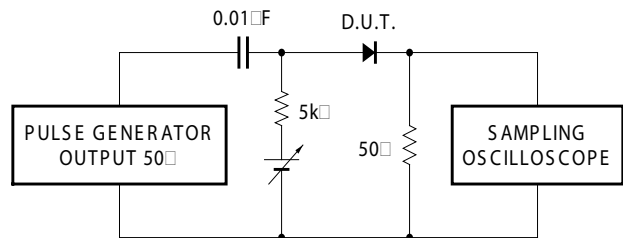


Fig.6 Reverse recovery time (t_r) measurement circuit