

Surface Mount Switching Diodes

(Pb) Lead(Pb)-Free

Feature:

- * Extremely High Switching Speed
- * Low Reverse Leakage Current
- * High Reliability
- * Small Outline Surface Mount SOD-923 Package

Applications:

- * High Speed Switching

SWITCHING DIODES

100m AMPERES

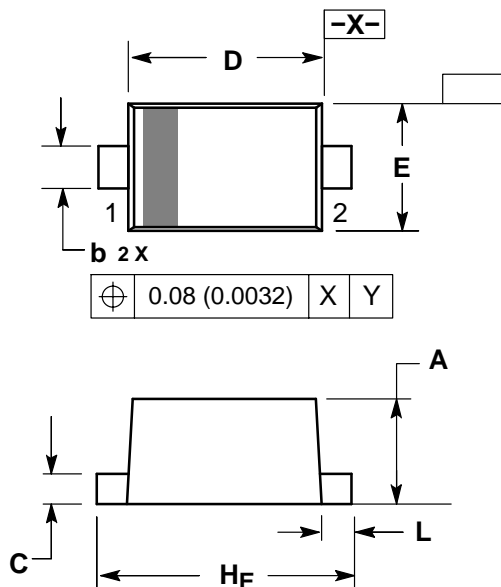
90 VOLTS



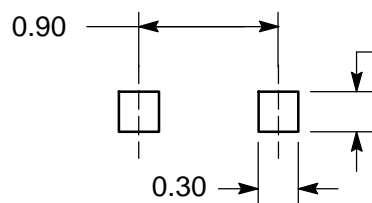
SOD-923

SOD-923 Outline Dimensions

Unit:mm



MILLIMETERS			
DIM	MIN	NOM	MAX
A	0.34	0.39	0.43
b	0.15	0.20	0.25
c	0.07	0.12	0.17
D	0.75	0.80	0.85
E	0.55	0.60	0.65
HE	0.95	1.00	1.05
L	0.05	0.10	0.15



SOLDERING FOOTPRINT

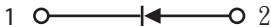
Maximum Ratings (T_A=25°C Unless otherwise noted)

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
Junction Temperature	T _j	125	°C
Storage Temperature	T _{stg}	-55 + 125	°C

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

Characteristic	Symbol	Min	Max	Unit
Forward Voltage I _F =100mA	V _F	-	1.2	Volts
Reverse Leakage V _R =80V	I _R	-	0.1	uAdc
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
1SS400D	3	

ELECTRICAL CHARACTERISTIC CURVES ($T_a = 25^\circ\text{C}$)

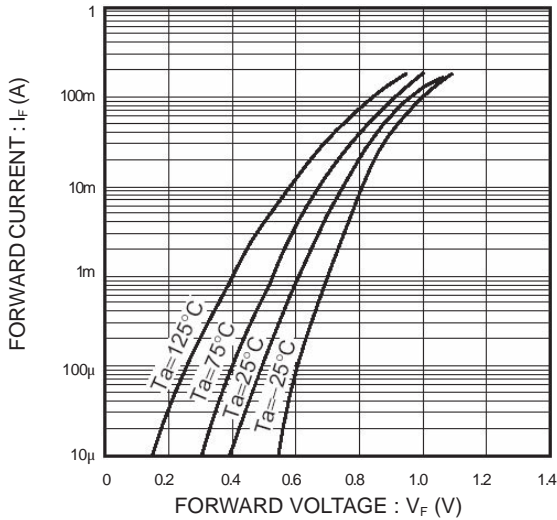


Fig.1 Forward characteristics

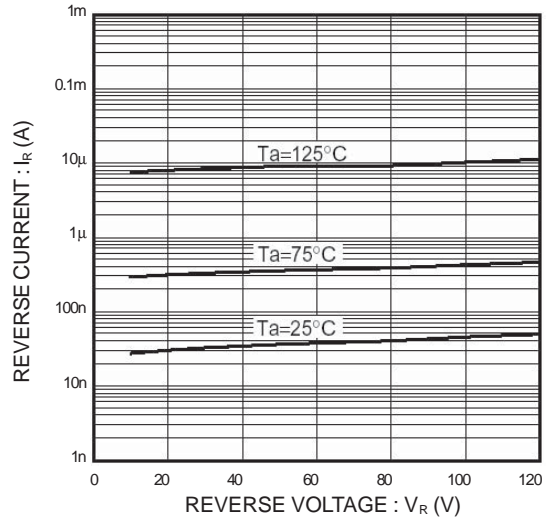


Fig.2 Reverse characteristics

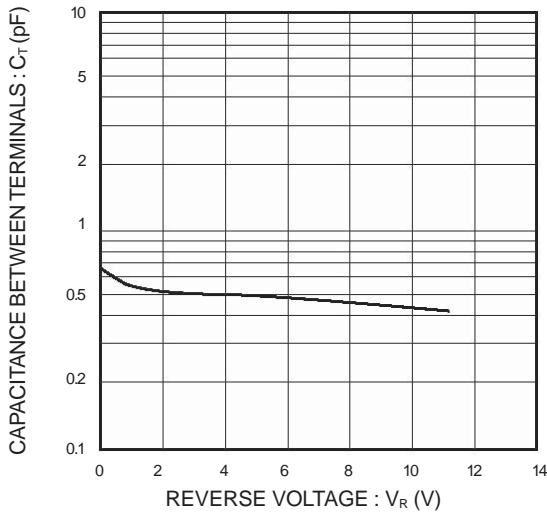


Fig.3 Capacitance between terminals

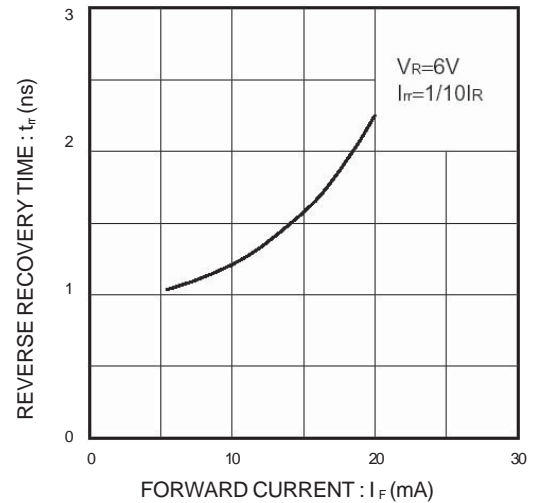


Fig.4 Reverse recovery time characteristics

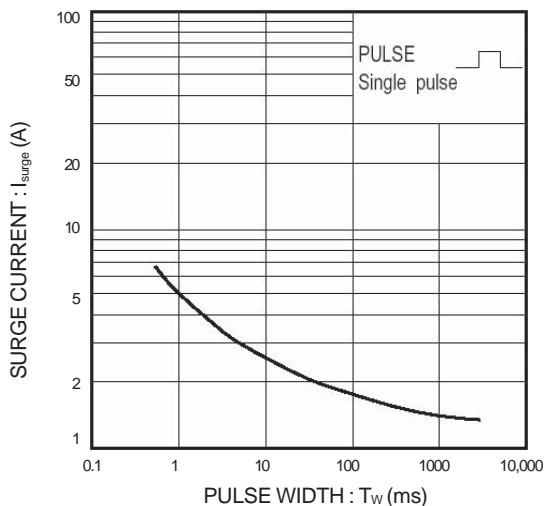


Fig.5 Surge current characteristics

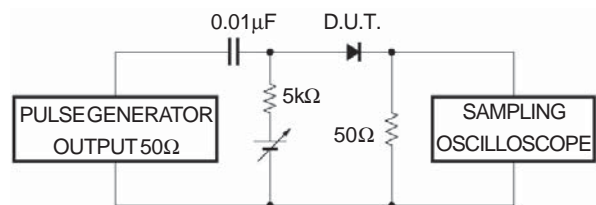


Fig.6 Reverse recovery time (t_{rr}) measurement circuit