



DESCRIPTION

The 1SS400 is available in SOD-523 package

ORDERING INFORMATION

Package Type	Part Number
SOD-523	1SS400
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



FEATURES

- Extremely small surface mounting type.
- High Speed.
- High reliability.
- **Construction**
Silicon epitaxial planar
- RoHS Compliant
- Available in SOD-523 package

APPLICATIONS

- High speed switching



ABSOLUTE MAXIMUM RATINGS

$T_A = 25^\circ\text{C}$

V_{RM} , Peak Reverse Voltage	90 V
V_R , DC Reverse Voltage	80 V
I_{FM} , Peak Forward Current	225mA
I_O , Mean Rectifying Current	100mA
I_{surge} , Surge Current (1s)	500mA
T_J , Junction Temperature	150°C
T_{STG} , Storage Temperature	-55 °C ~+150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

$T_A = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ.	Max	Unit
Forward Voltage	V_F	$I_F=100\text{mA}$	-	-	1.2	V
Reverse Current	I_R	$V_R=80\text{V}$	-	-	0.1	μA
Capacitance Between Terminals	C_T	$V_R=0.5\text{V}$, $f=1\text{MHz}$	-	0.72	3.0	pF
Reverse Recovery Time	t_{rr}	$V_R=6\text{V}$, $I_F=10\text{mA}$, $R_L=100$	-	-	4.0	ns



TYPICAL CHARACTERISTICS

$T_A = 25^\circ\text{C}$

Figure 1. Forward Characteristics

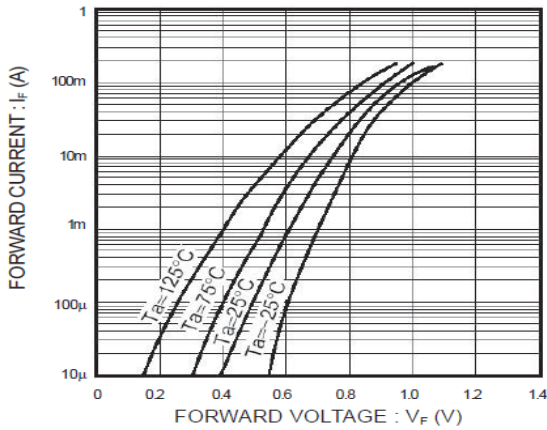


Figure 2. Reverse Characteristics

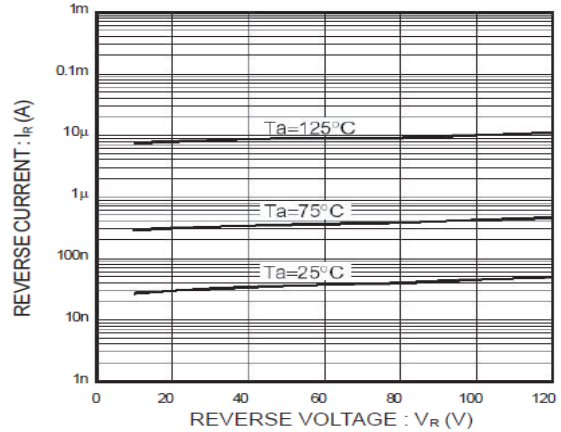


Figure 3. Capacitance Between Terminals

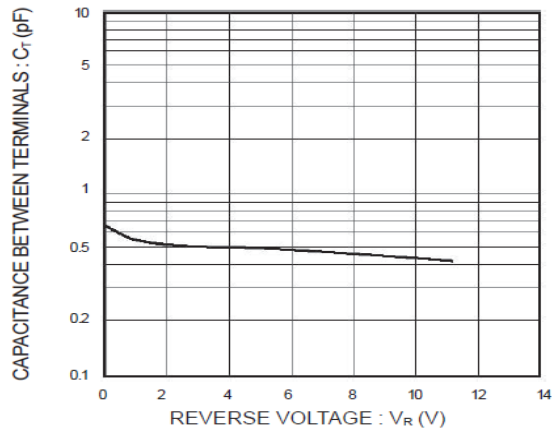


Figure 4. Reverse Recovery Time Characteristics

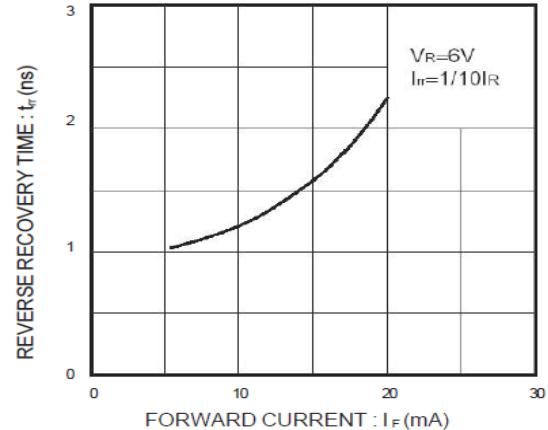


Figure 5. Surge Current Characteristics

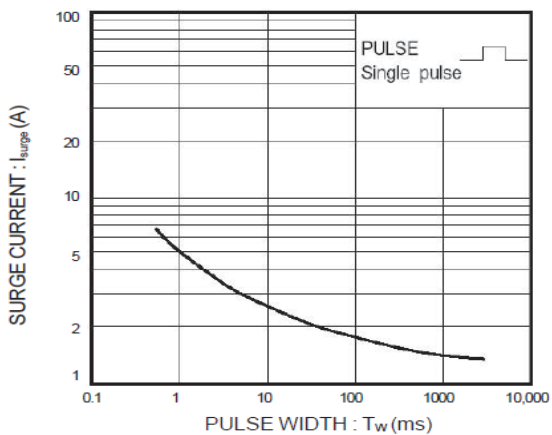
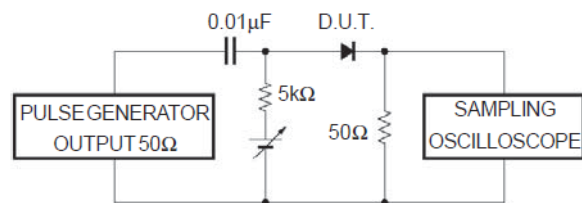


Figure 6. Reverse Recovery Time (T_{rr})

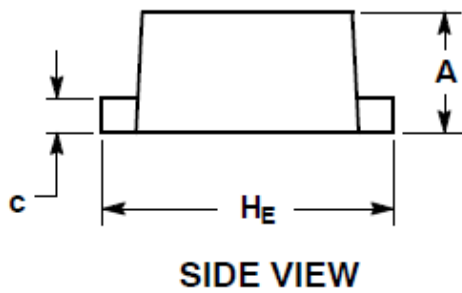
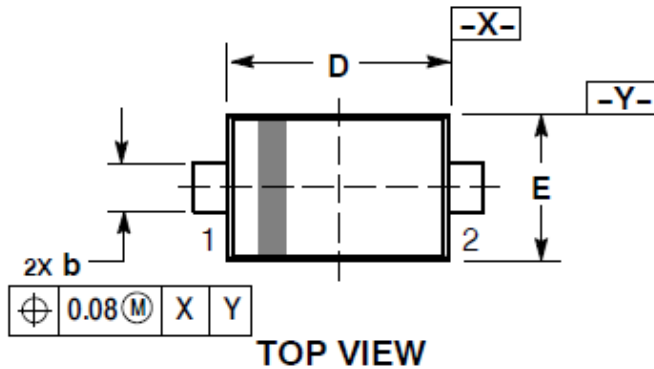
Measurement Circuit



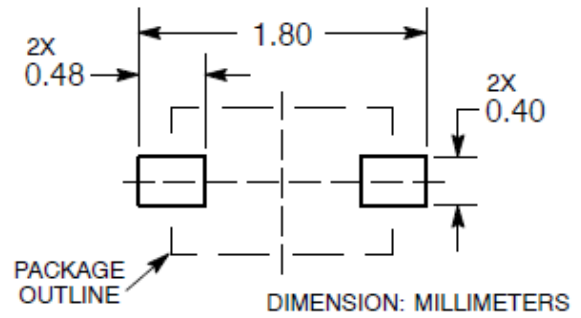


PACKAGE INFORMATION

Dimension in SOD-523 (Unit: mm)



RECOMMENDED SOLDERING FOOTPRINT*



DIM	MILLIMETERS		
	MIN	NOM	MIN
A	0.50	0.60	0.70
b	0.25	0.30	0.35
c	0.07	0.14	0.20
D	1.10	1.20	1.30
E	0.70	0.80	0.90
H _E	1.50	1.60	1.70
L	0.30 REF		
L2	0.15	0.20	0.25



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