

1SS400WS

Silicon Epitaxial Planar Switching Diode

for high speed switching application

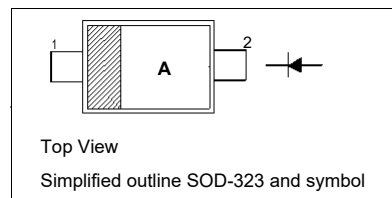
Features

- Extremely small surface mounting type
- High reliability

Marking Code: **A**

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	90	V
Reverse Voltage	V_R	80	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Peak Forward Current	I_{FM}	225	mA
Non-repetitive Peak Forward Surge Current (at $t = 1$ s)	I_{FSM}	500	mA
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^{\circ}\text{C}$

Characteristics at $T_a = 25^{\circ}\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100$ mA	V_F	1.2	V
Reverse Current at $V_R = 80$ V	I_R	0.1	μA
Capacitance Between Terminals at $V_R = 0.5$ V, $f = 1$ MHz	C_T	3	pF
Reverse Recovery Time at $V_R = 6$ V, $I_F = 10$ mA, $R_L = 100$ Ω	t_{rr}	4	ns

Typical Characteristics

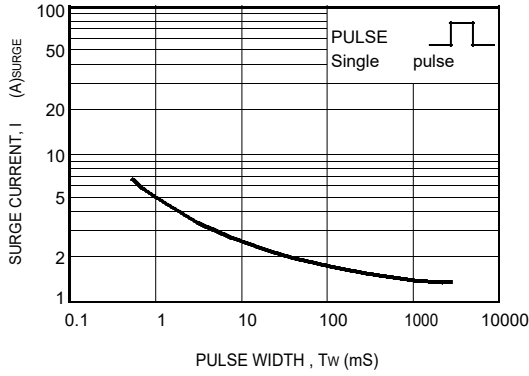


FIG. 1 - SURGE CURRENT CHARACTERISTICS

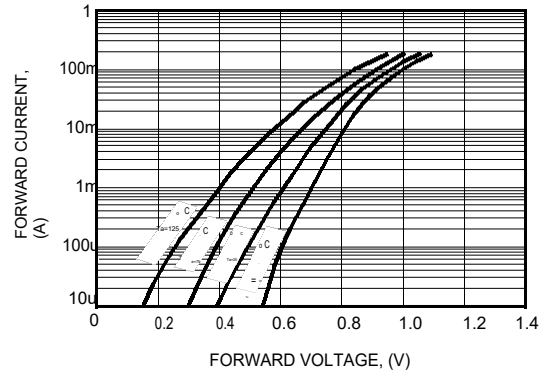


FIG. 2 - FORWARD CHARACTERISTICS

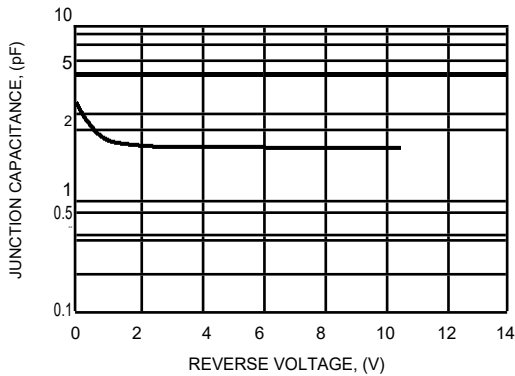


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

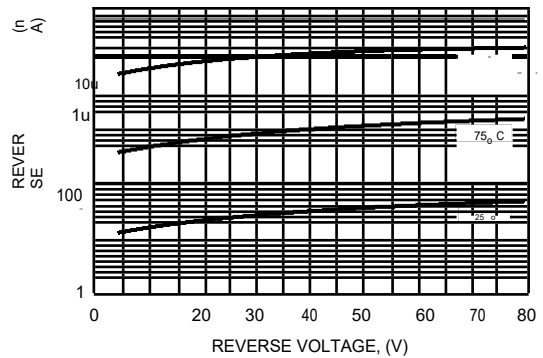


FIG. 4 - REVERSE CHARACTERISTICS

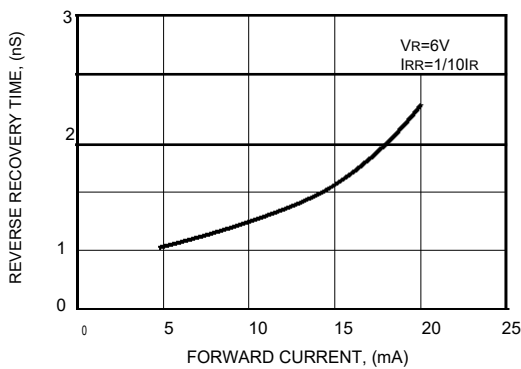


FIG. 5 - REVERSE RECOVERY TIME

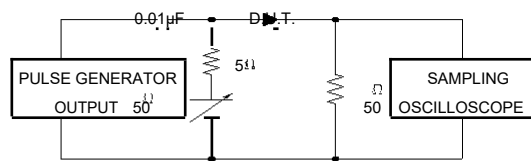


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323

