

1SS400

Silicon Epitaxial Planar Switching Diode

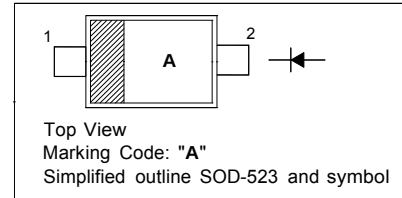
for high speed switching application

Features

- Extremely small surface mounting type
- High reliability

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 $t = 1\text{ s}$)	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 $I_F = 100\text{ mA}$	V_F	1.2	V
Reverse Current at $V_R = 80\text{ V}$	I_R	0.1	μA
Capacitance Between Terminals at $V_R = 0.5\text{ V}$, $f = 1\text{ MHz}$	C_T	3	pF
Reverse Recovery Time at $V_R = 6\text{ V}$, $I_F = 10\text{ mA}$, $R_L = 100\ \Omega$	t_{rr}	4	ns

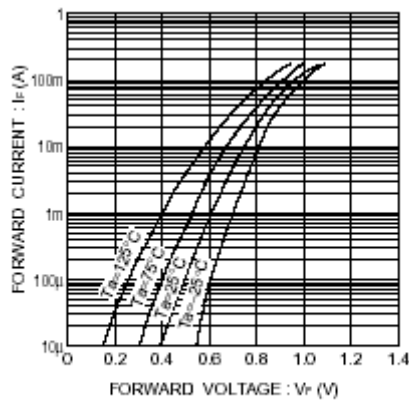


Fig.1 Forward characteristics

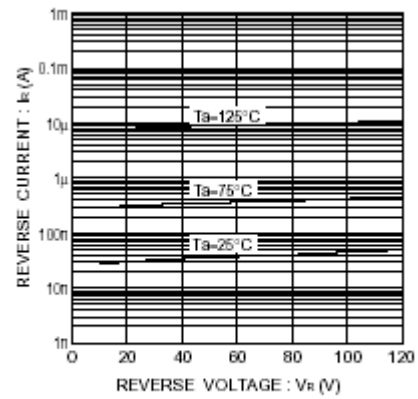


Fig.2 Reverse characteristics

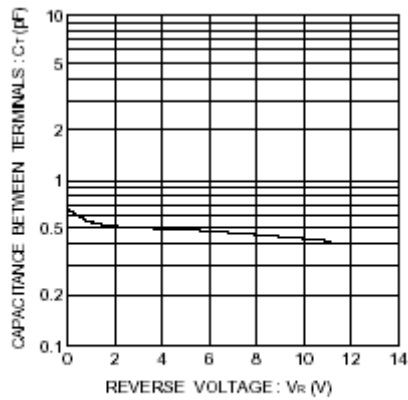


Fig.3 Capacitance between terminals

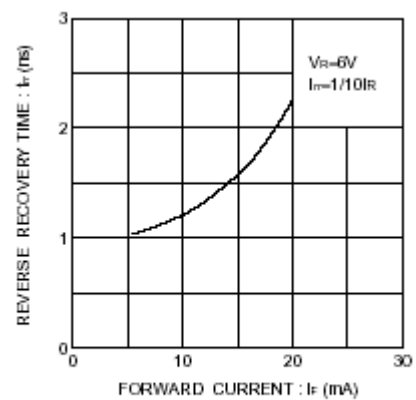


Fig.4 Reverse recovery time characteristics

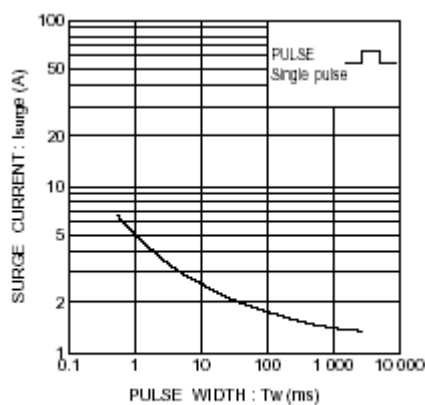


Fig.5 Surge current characteristics

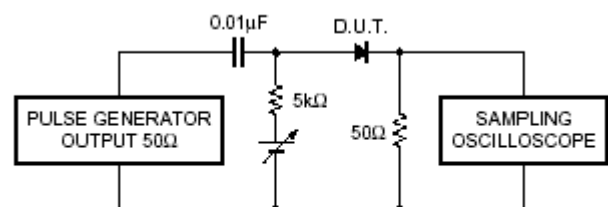
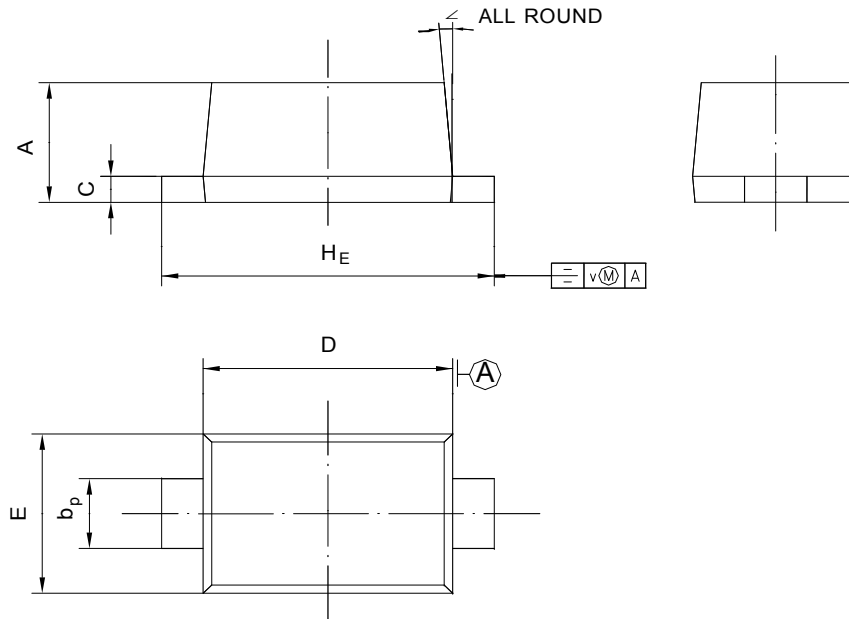


Fig.6 Reverse recovery time (t_r) measurement circuit

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°