



1SS400

HIGH SPEED SWITCHING DIODE

Features

- Extremely small surface mounting type
- Small package
- High speed and high reliability

Applications

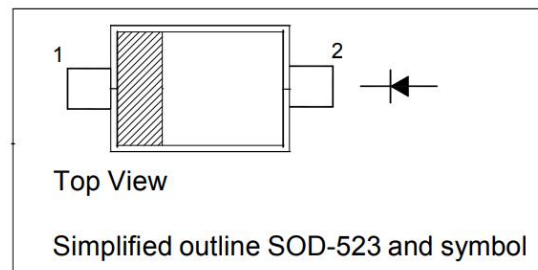
- High speed switching

Ordering Information

Type NO.	Marking	Package Code
1SS400	A	SOD-523

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings@ $T_a = 25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	Condition	Unit
Peak Reverse Voltage	V_{RM}	90	V
DC Reverse Voltage	V_R	80	V
Average Rectified Forward Current	I_F	100	mA
Peak Forward Current	I_{FM}	225	mA
Non-Repetitive Peak Forward Surge Current@ $t=1\text{s}$	I_{FSM}	500	mA
Total Power Dissipation	P_{tot}	150	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55~+150	$^{\circ}\text{C}$

Electrical Characteristics@ $T_a = 25^{\circ}\text{C}$, unless specified otherwise

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=100\text{mA}$			1.2	V
Reverse Voltage Leakage Current	I_R	$V_R=80\text{V}$			0.1	μA
Capacitance Between Terminals	C_T	$V_R=0.5\text{V}, f=1\text{MHz}$			3	pF
Revers Recovery Time	t_{rr}	$V_R=6\text{V}, I_F=10\text{mA}, R_L=100\Omega$			4	ns



Typical Characteristics @ $T_a = 25^\circ\text{C}$, unless specified otherwise

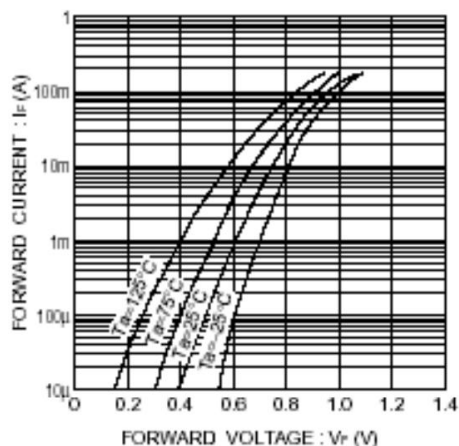


Fig.1 Forward characteristics

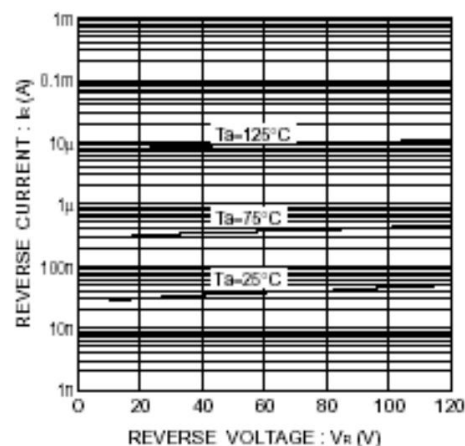


Fig.2 Reverse characteristics

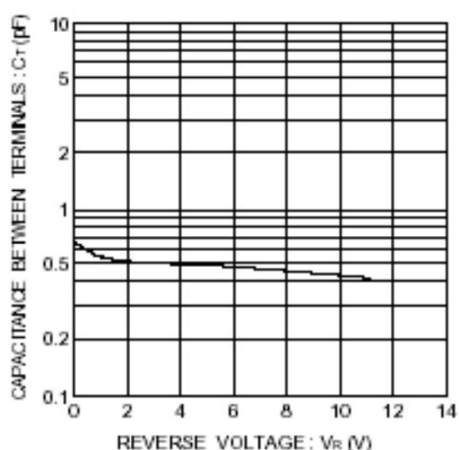


Fig.3 Capacitance between terminals

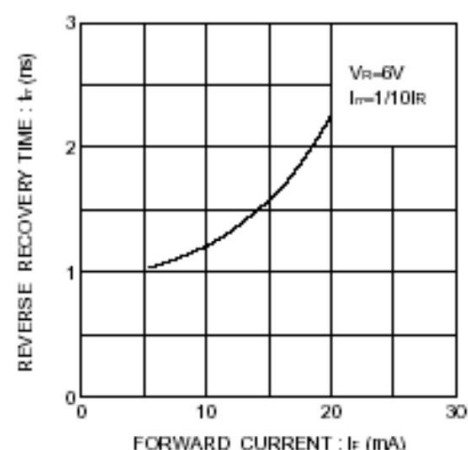


Fig.4 Reverse recovery time characteristics

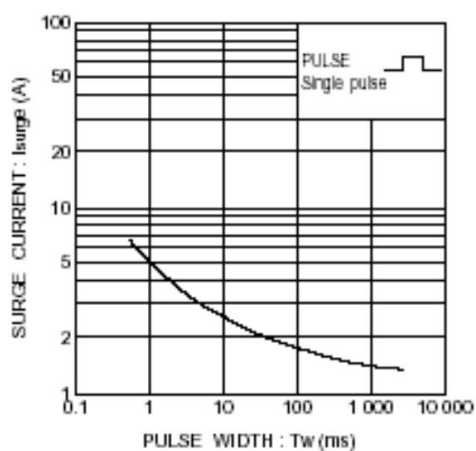


Fig.5 Surge current characteristics

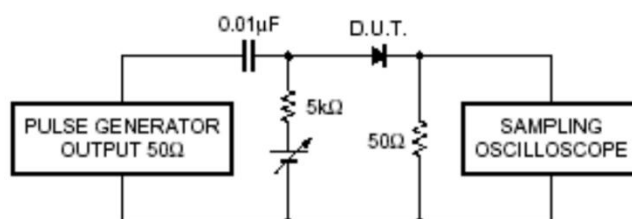


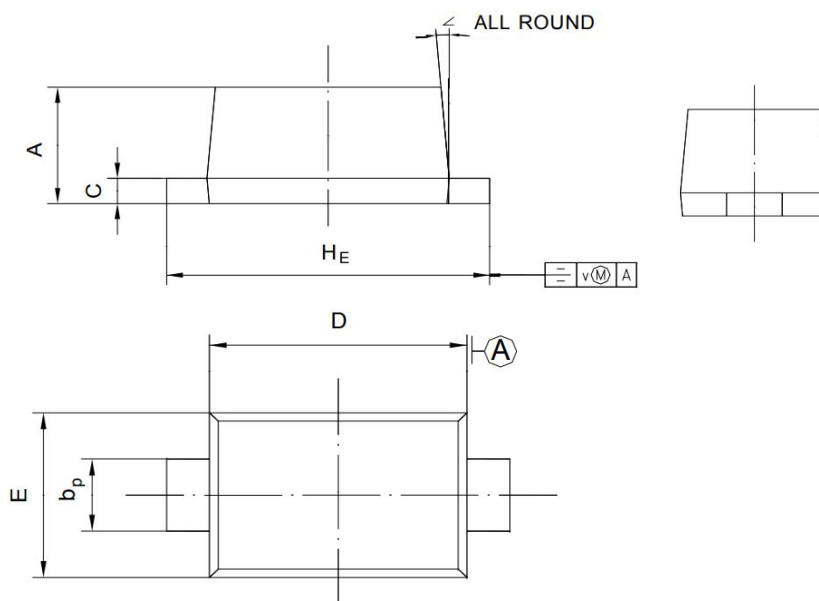
Fig.6 Reverse recovery time (t_r) measurement circuit



Package Information

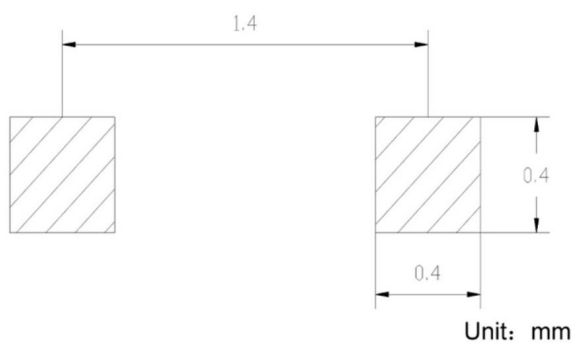
SOT-523

Dimensions in mm



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°

Soldering Footprint



Package Information

Device	Package	Shipping
1SS400	SOD-523	3000/Tape&Reel