

# Switching diode

## 1SS400

### ●Applications

High speed switching

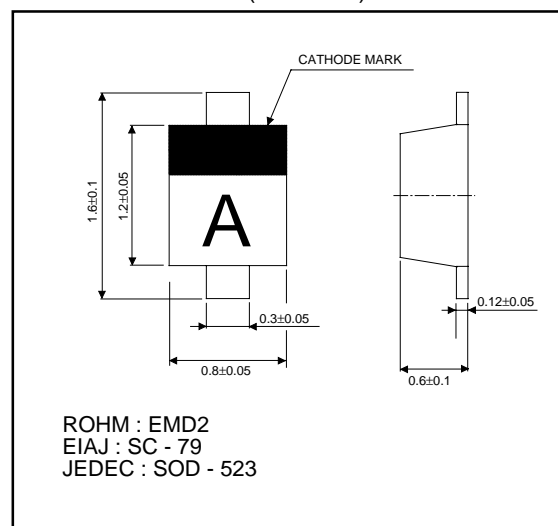
### ●Features

- 1) Extremely small surface mounting type.(EMD2)
- 2) High Speed.( $t_{rr}$ =1.2ns Typ.)
- 3) High reliability.

### ●Construction

Silicon epitaxial planar

### ●External dimensions (Units : mm)



### ●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	90	V
DC reverse voltage	$V_R$	80	V
Peak forward current	$I_{FM}$	225	mA
Mean rectifying current	$I_o$	100	mA
Surge current (1s)	$I_{surge}$	500	mA
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 ~ +125	°C

### ●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	—	—	1.2	V	$I_F=100mA$
Reverse current	$I_R$	—	—	0.1	$\mu A$	$V_R=80V$
Capacitance between terminals	$C_T$	—	0.72	3.0	pF	$V_R=0.5V$ , $f=1MHz$
Reverse recovery time	$t_{rr}$	—	—	4	ns	$V_R=6V$ , $I_F=10mA$ , $R_L=100\Omega$

## Diodes

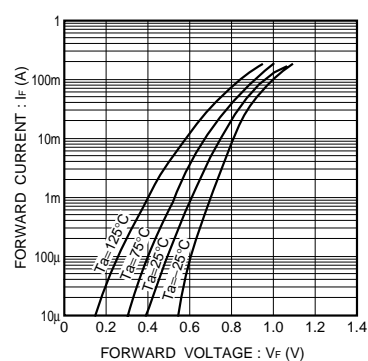
●Electrical characteristic curves ( $T_a = 25^\circ\text{C}$ )

Fig.1 Forward characteristics

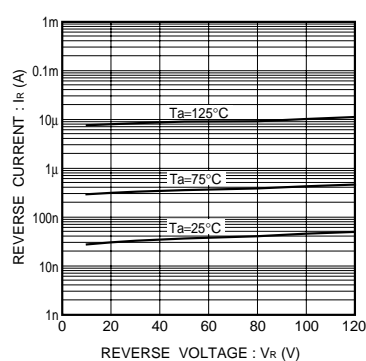


Fig.2 Reverse characteristics

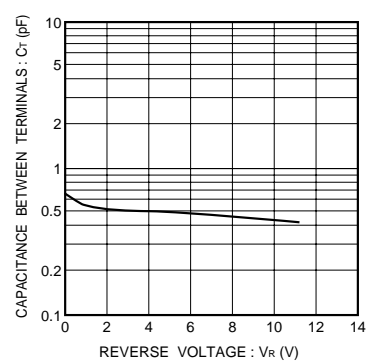


Fig.3 Capacitance between terminals

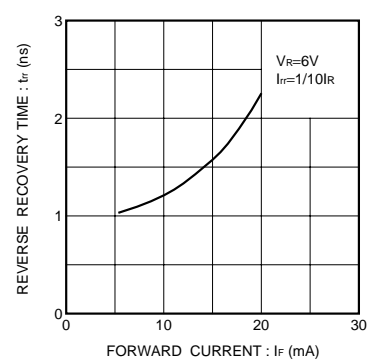


Fig.4 Reverse recovery time characteristics

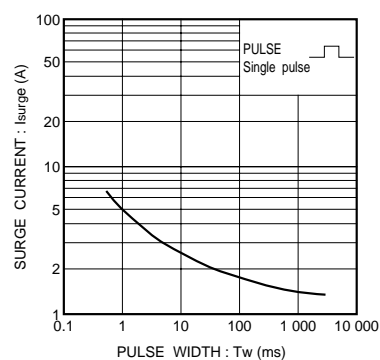
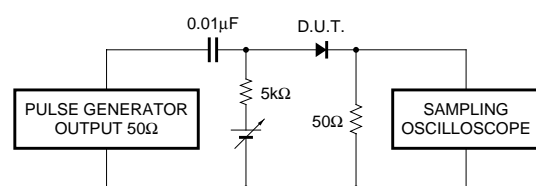


Fig.5 Surge current characteristics

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

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