

Switching diode

1SS400

●Applications

High speed switching

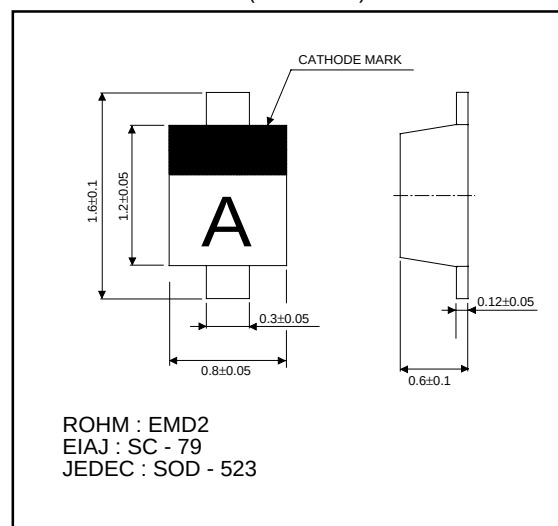
●Features

- 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	μA	$V_R=80V$
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

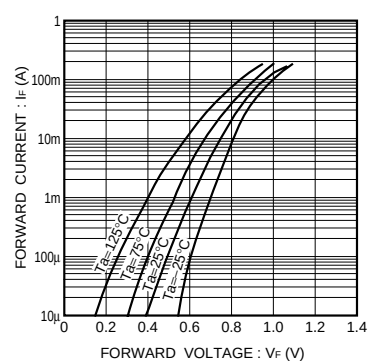
●Electrical characteristic curves ($T_a = 25^\circ\text{C}$)

Fig.1 Forward characteristics

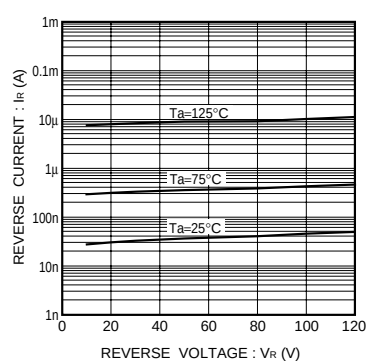


Fig.2 Reverse characteristics

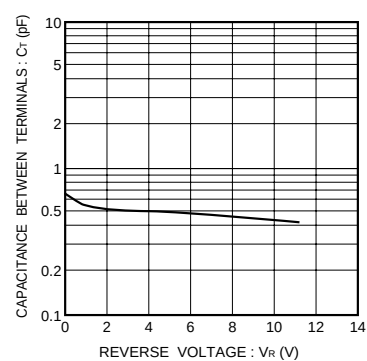


Fig.3 Capacitance between terminals

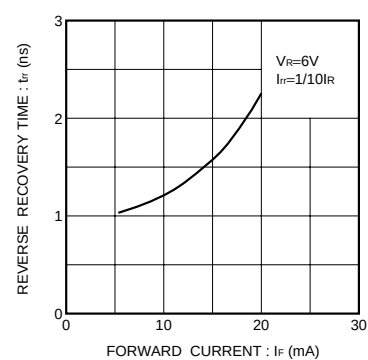


Fig.4 Reverse recovery time characteristics

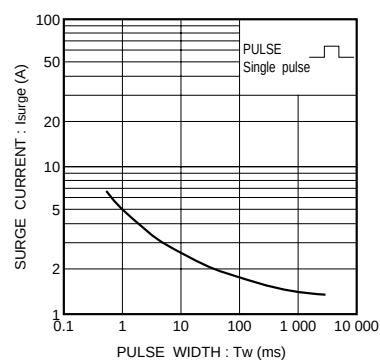
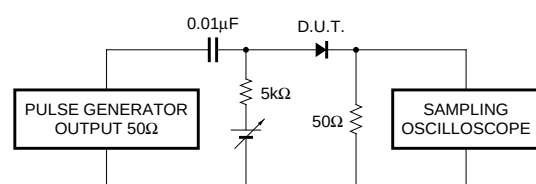


Fig.5 Surge current characteristics

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