

Switching diode

1SS400

●Applications

High speed switching

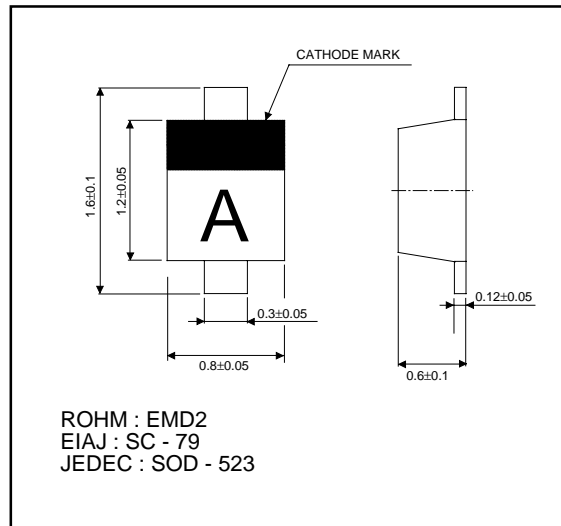
●Features

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

●Construction

Silicon epitaxial planar

●External dimensions (Units : mm)



●Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

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	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 ~ +125	$^\circ\text{C}$

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

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

Diodes

●Electrical characteristic curves (Ta = 25°C)

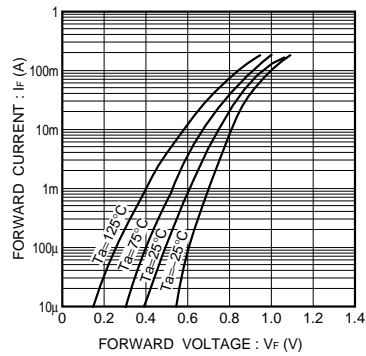


Fig.1 Forward characteristics

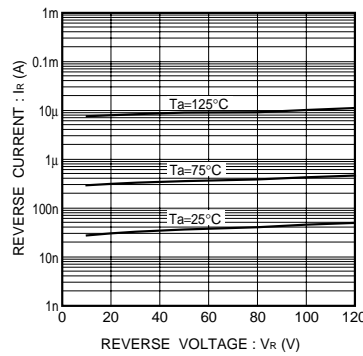


Fig.2 Reverse characteristics

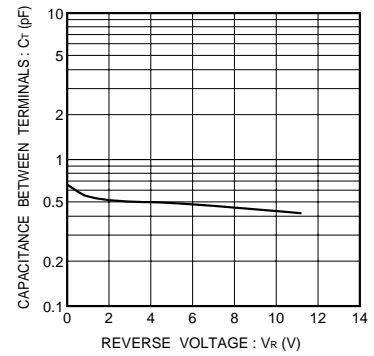


Fig.3 Capacitance between terminals

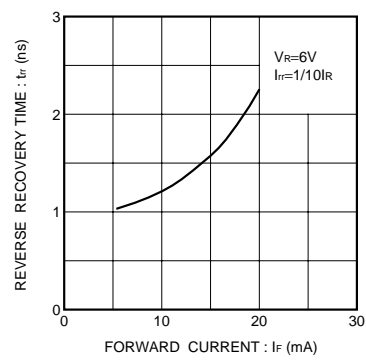


Fig.4 Reverse recovery time characteristics

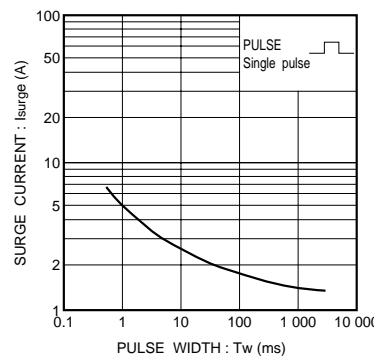


Fig.5 Surge current characteristics

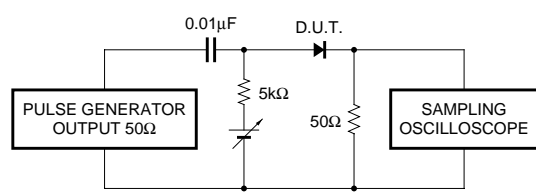


Fig.6 Reverse recovery time (trr) measurement circuit