High-Speed Switching Diode

1SS400

• Applications

High speed switching

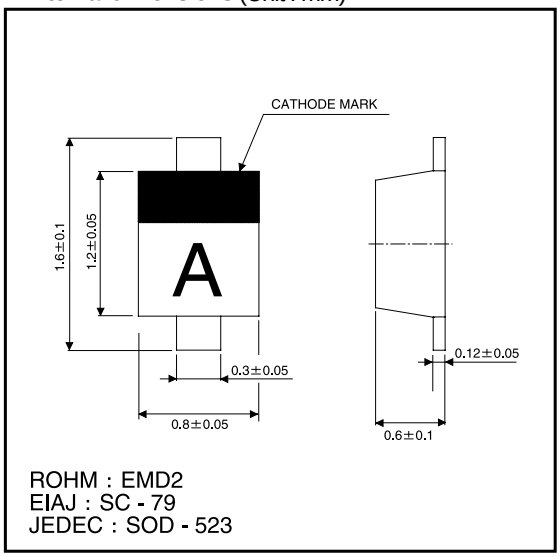
• Features

1) Extremely small surface mounting type.(EMD2)
2) High Speed.(typical recovery time = 1.2ns Typ.)
3) Highly reliable.

• Construction

Silicon epitaxial planar

• External dimensions (Unit : mm)



ROHM : EMD2
EIAJ : SC - 79
JEDEC : SOD - 523

• 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	Io	100	mA
Surge current (1S)	Isurge	500	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 ~ +125	°C

• Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward voltage	V_F	-	0.94	1.2	V	I_F=100mA
Reverse current	I_R	-	0.03	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}	-	1.2	4	ns	V_R=6V, I_F=10mA, R_L=100Ω

● **Electrical characteristic curve** (Ta=25°C unless specified otherwise)

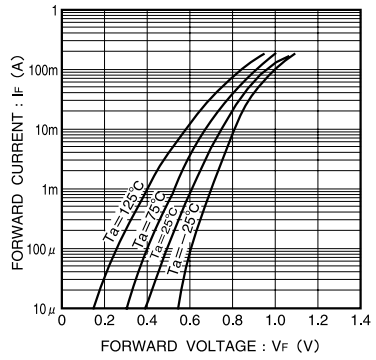


Fig.1 Forward characteristics

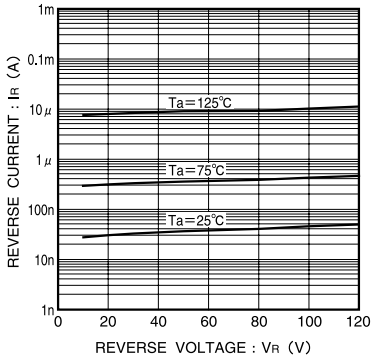


Fig.2 Reverse characteristics

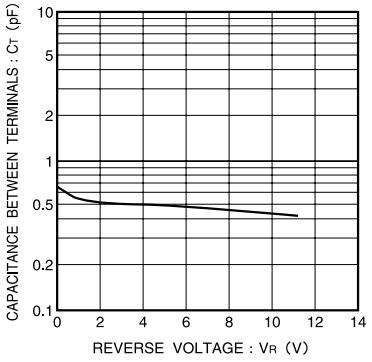


Fig.3 Capacitance between terminals

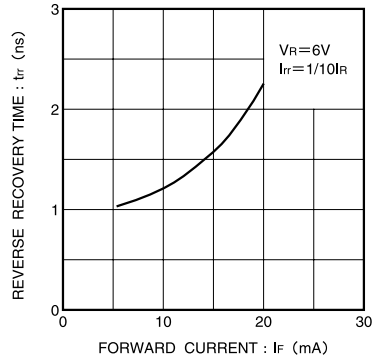


Fig.4 Reverse recovery time characteristics

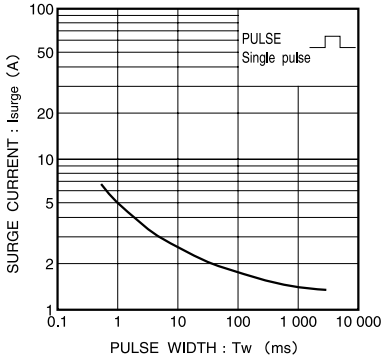


Fig.5 Surge current characteristics

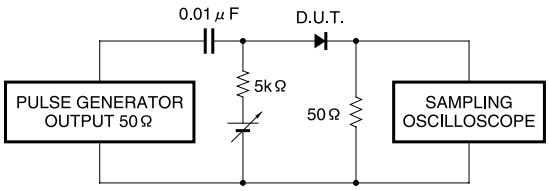


Fig.6 Reverse recovery time(T_{rr})measurement circuit