

Switching diode

1SS355

●Applications

High speed switching

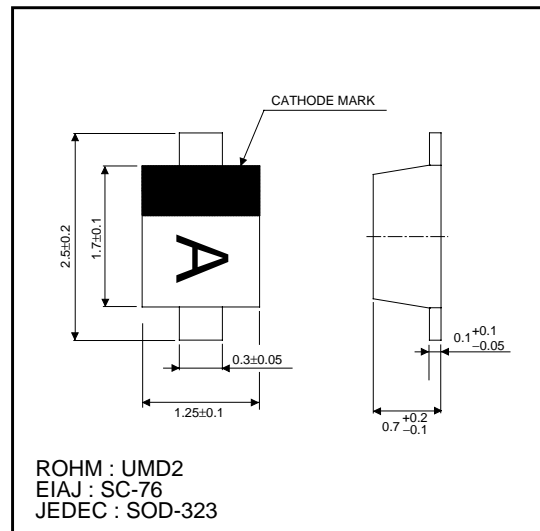
●Features

- 1) Small surface mounting type.(UMD2)
- 2) High Speed.(t_{rr} =1.2ns Typ.)
- 3) High reliability with high surge current handling capability.

●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	-	-	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 (Ta=25°C)

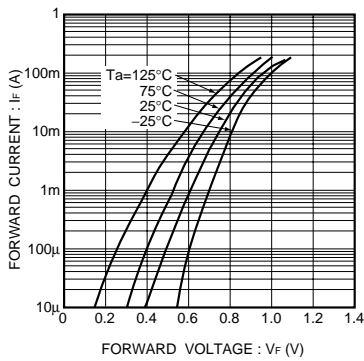


Fig.1 Forward characteristics

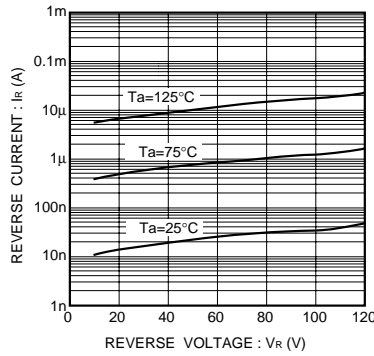


Fig.2 Reverse characteristics

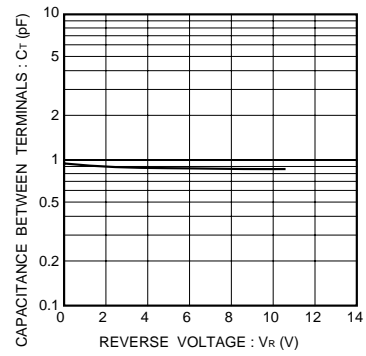


Fig.3 Capacitance between terminals characteristics

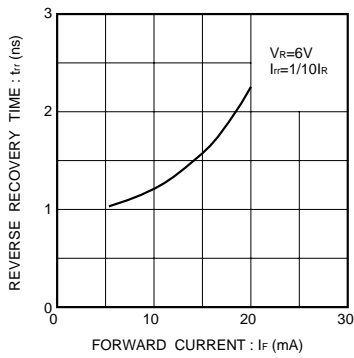


Fig.4 Reverse recovery time characteristics

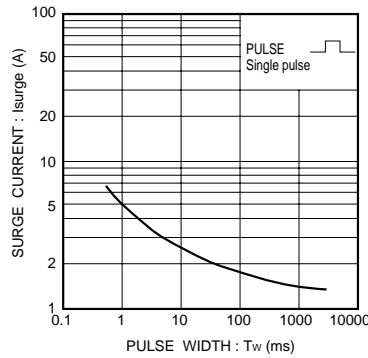


Fig.5 Surge current characteristics

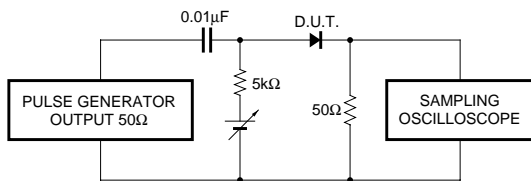


Fig.6 Reverse recovery time (trr) measurement circuit