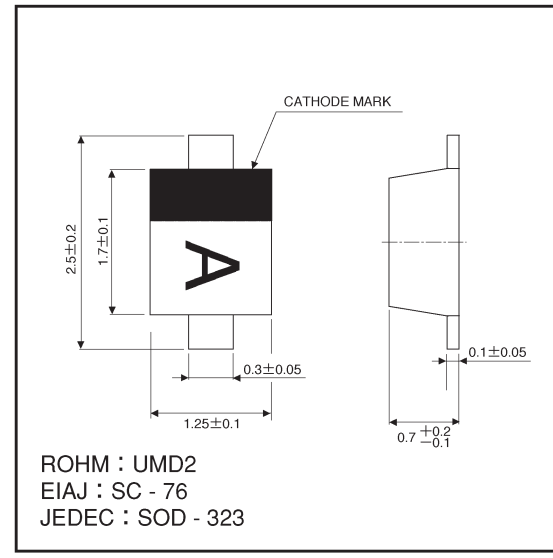
High–Speed Switching Diode
1SS355

●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	Tj	125	℃
Storage temperature	Tstg	−55～+125	℃

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
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 curves (Ta = 25°C unless specified otherwise)

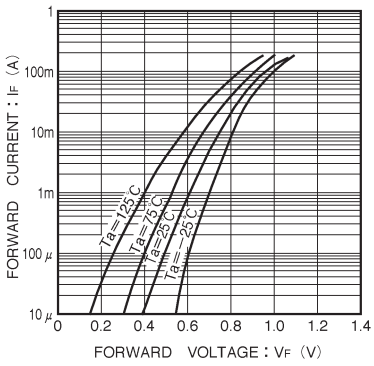


Fig. 1 Forward characteristics

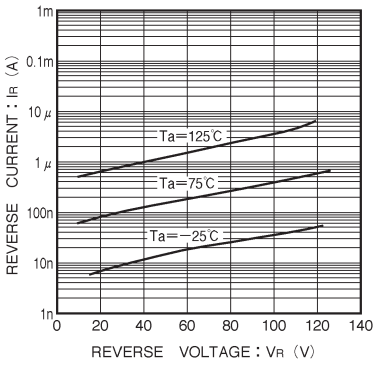


Fig. 2 Reverse characteristics

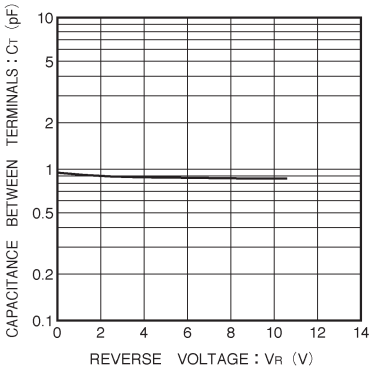


Fig.3 Capacitance between terminals characteristics

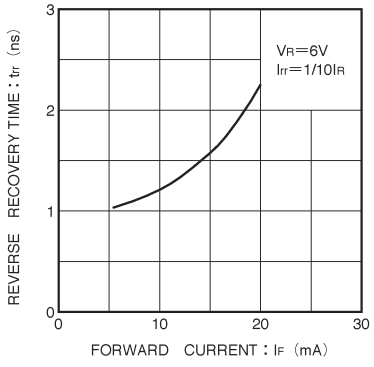


Fig. 4 Reverse recovery time characteristics

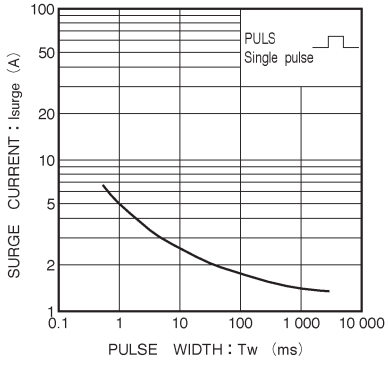


Fig. 5 Surge current characteristics

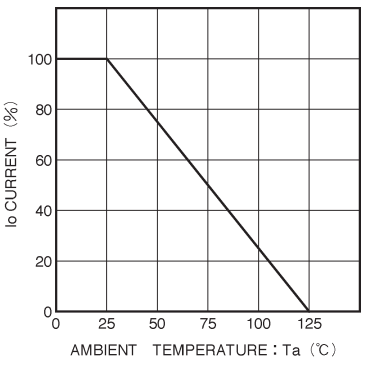


Fig. 6 Derating curve (mounting on glass epoxy PCBs)

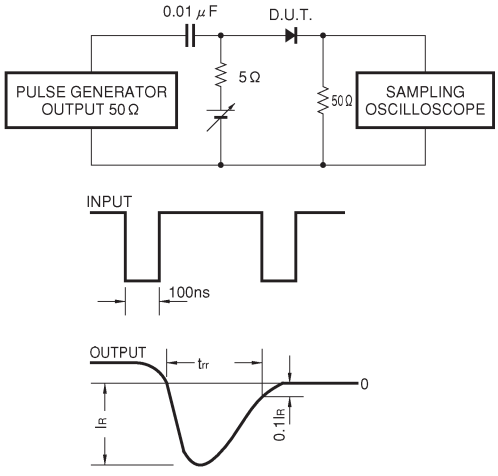


Fig. 7 Reverse recovery time (t_{rr}) measurement circuit