

High-voltage band switching diode

1SS376

●Applications

High voltage switching

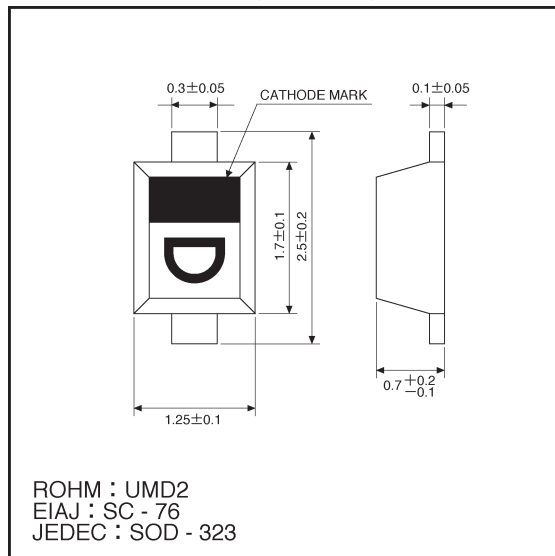
●Features

- 1) High reliability.
- 2) Small surface mounting type. (UMD2)
- 3) Peak reverse voltage guaranteed at 300V with this size.

●Construction

Silicon epitaxial planar

●External dimensions (Units: mm)



●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	300	V
DC reverse voltage	V_R	250	V
Peak forward current	I_{FM}	300	mA
Mean rectifying current	I_O	100	mA
Surge current (10ms)	I_{surge}	2	A
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	—	0.97	1.2	V	$I_F=100\text{mA}$
Reverse current	I_R	—	0.03	0.2	μA	$V_R=250\text{V}$
Reverse current	I_R	—	—	100	μA	$V_R=300\text{V}$
Capacitance between terminals	C_T	—	1.2	3	pF	$V_R=0\text{V}$, $f=1\text{MHz}$
Reverse recovery time	t_{rr}	—	30	100	ns	$I_R=30\text{mA}$ $I_F=30\text{mA}$ $I_{rr}=3\text{mA}$

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

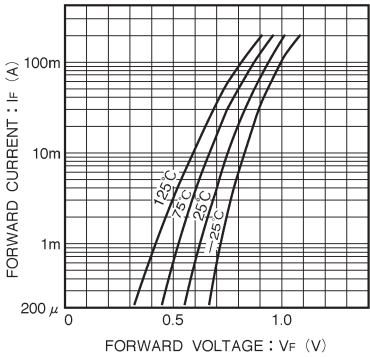


Fig. 1 Forward characteristics

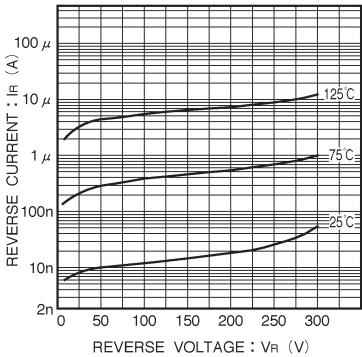


Fig. 2 Reverse characteristics

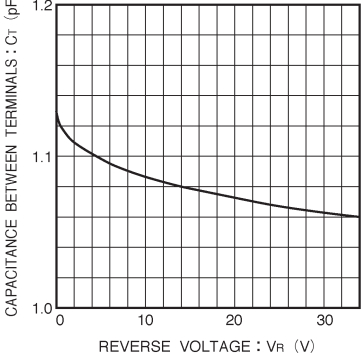


Fig. 3 Capacitance between terminals characteristics

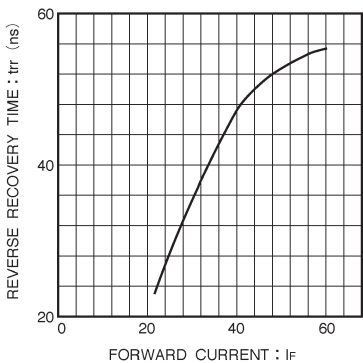


Fig. 4 Reverse recovery time characteristics

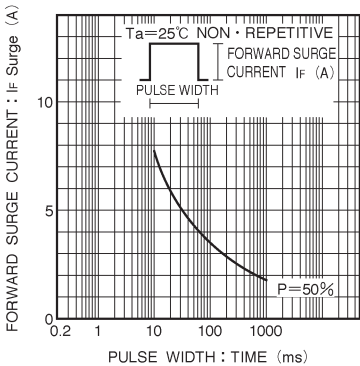


Fig. 5 Surge current characteristics

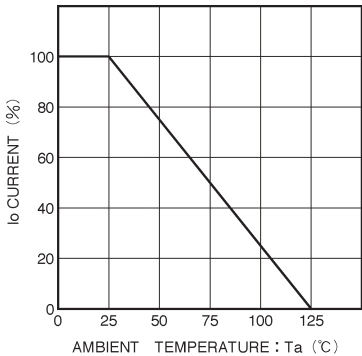


Fig. 6 Derating curve (mounting on glass epoxy PCBs)