

# Low-leakage switching diode

## 1SS380

### ●Applications

Low leakage switching

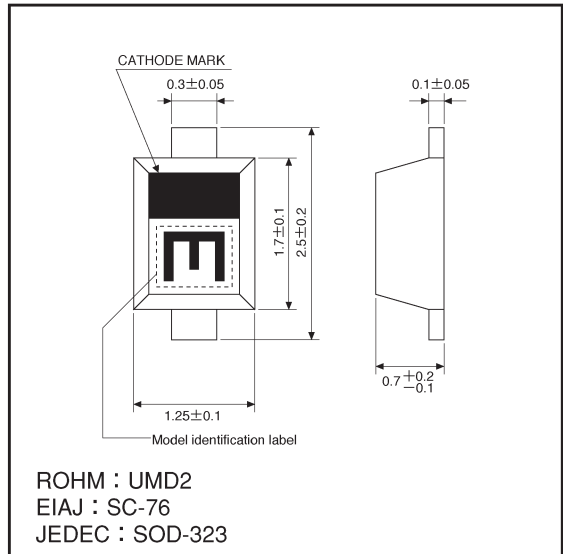
### ●Features

- 1) High reliability.
- 2) Small surface mounting type. (UMD2)
- 3) The typical reverse current is extremely low of 40pA.

### ●Construction

Silicon epitaxial planar

### ●External dimensions (Units: mm)



### ●Absolute maximum ratings

Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	40	V
DC reverse voltage	$V_R$	35	V
Peak forward current	$I_{FM}$	225	mA
Mean rectifying current	$I_O$	100	mA
Surge current (1 $\mu$ s)	$I_{surge}$	400	mA
Junction temperature	$T_J$	125	$^{\circ}$ C
Storage temperature	$T_{stg}$	-55~+125	$^{\circ}$ C

### ●Electrical characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	—	0.94	1.2	V	$I_F=100\text{mA}$
Reverse current	$I_R$	—	0.04	10	nA	$V_R=20\text{V}$
Capacitance between terminals	$C_T$	—	2.8	5.0	pF	$V_R=0.5\text{V}$ , $f=1\text{MHz}$

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

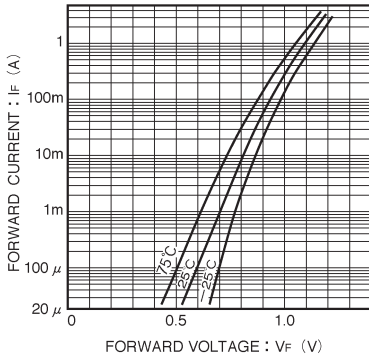


Fig. 1 Forward characteristics

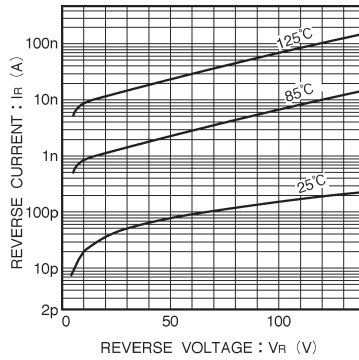


Fig. 2 Reverse characteristics

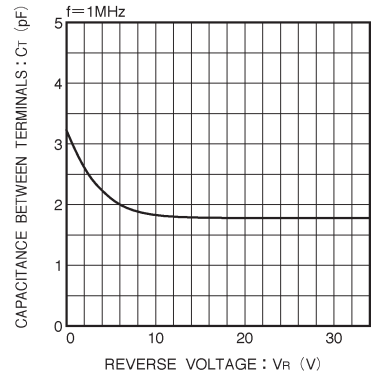


Fig. 3 Capacitance between terminals characteristics

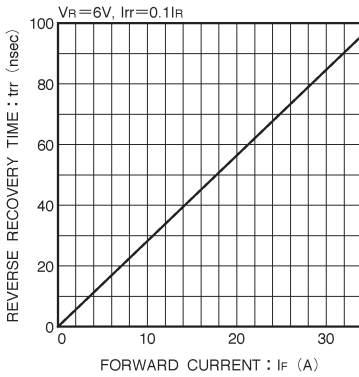


Fig. 4 Reverse recovery time characteristics

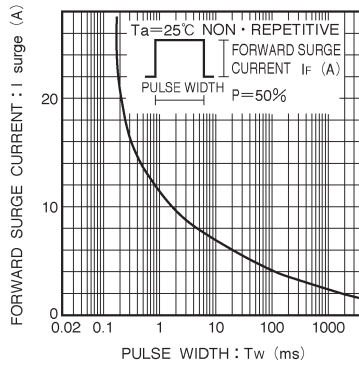


Fig. 5 Surge current characteristics

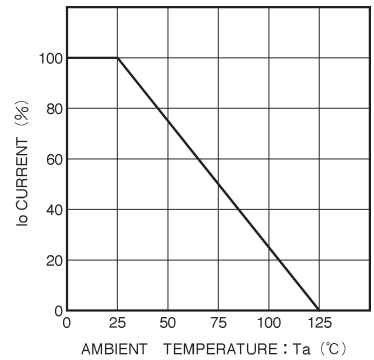


Fig. 6 Derating curve (mounting on glass epoxy PCBs)