

# Switching diode

## 1SS380

### ● Applications

Low leakage switching

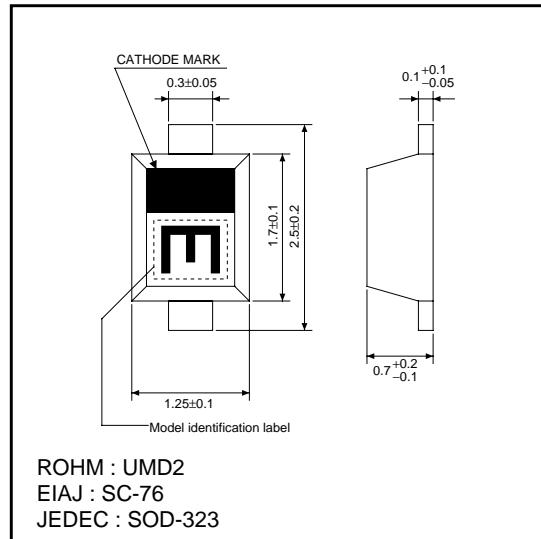
### ● Features

- 1) Small surface mounting type. (UMD2)
- 2) Ultra low  $I_R$ . ( $I_R=40\text{pA}$  Typ.)
- 3) High reliability.

### ● Construction

Silicon epitaxial planar

### ● External dimensions (Units : mm)



### ● Absolute maximum ratings ( $T_a = 25^\circ\text{C}$ )

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 (1s)	$I_{surge}$	400	mA
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55~+125	$^\circ\text{C}$

### ● Electrical characteristics ( $T_a = 25^\circ\text{C}$ )

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

## Diodes

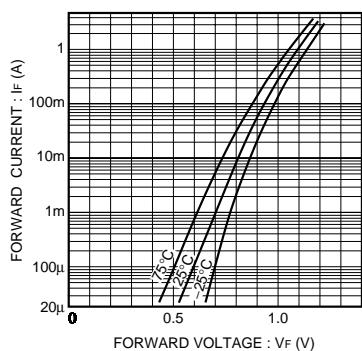
● Electrical characteristic curves ( $T_a = 25^\circ\text{C}$ )

Fig. 1 Forward characteristics

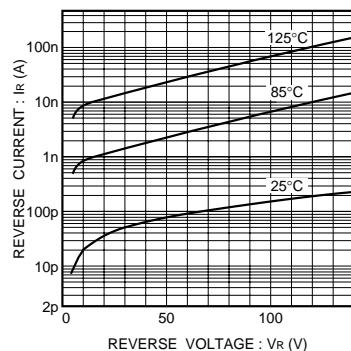


Fig. 2 Reverse characteristics

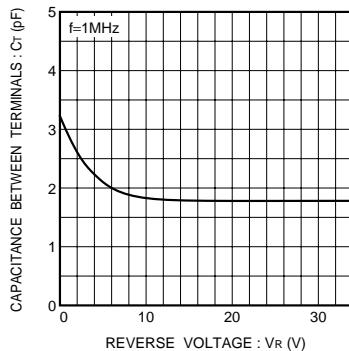


Fig. 3 Capacitance between terminals characteristics

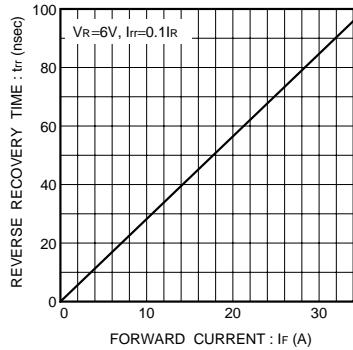


Fig. 4 Reverse recovery time characteristics

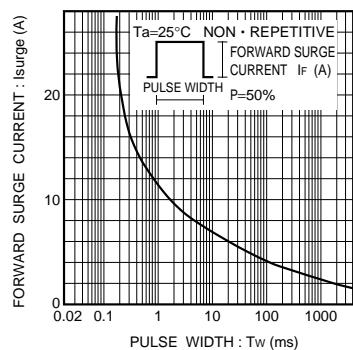
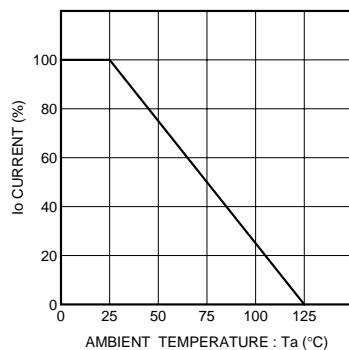


Fig. 5 Surge current characteristics

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