

Low-leakage switching diode

1SS380

●Applications

Low leakage switching

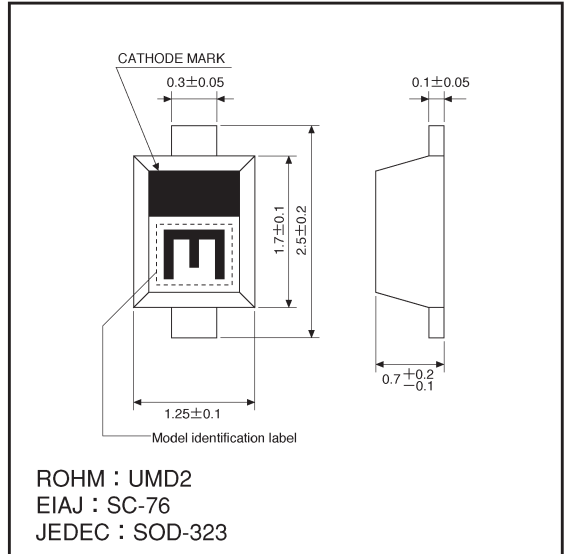
●Features

- 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 μ 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)

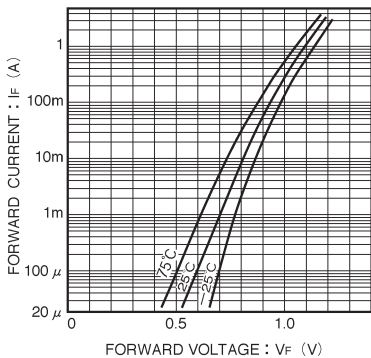


Fig. 1 Forward characteristics

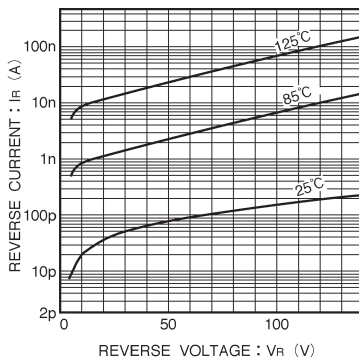


Fig. 2 Reverse characteristics

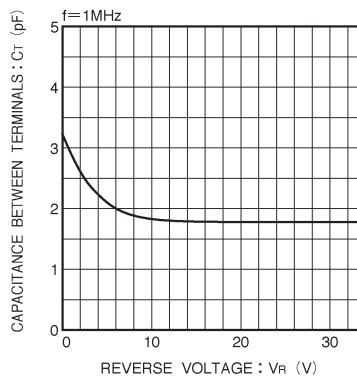


Fig. 3 Capacitance between terminals characteristics

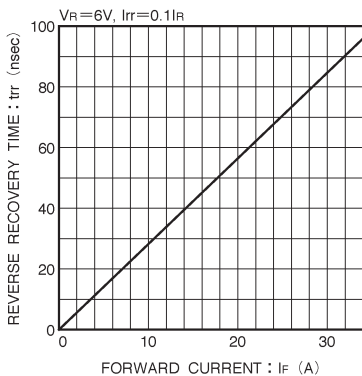


Fig. 4 Reverse recovery time characteristics

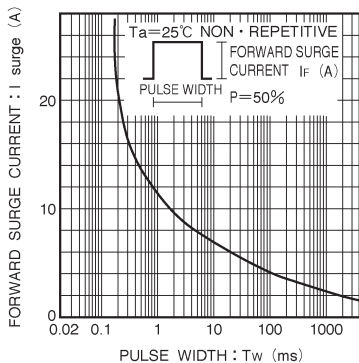


Fig. 5 Surge current characteristics

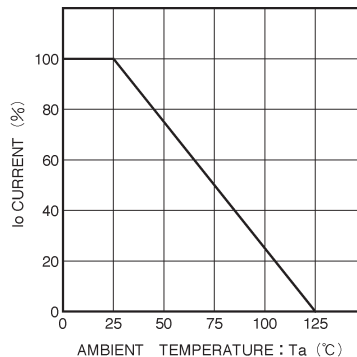


Fig. 6 Derating curve (mounting on glass epoxy PCBs)