

# Switching diode

## UMN1N

### ●Application

Ultra high speed switching

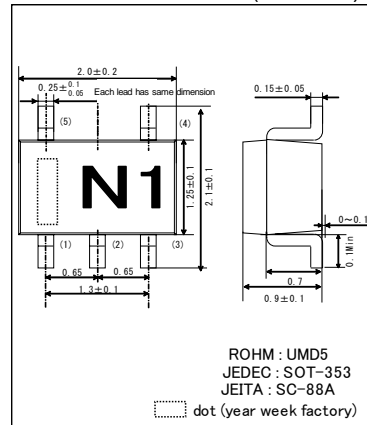
### ●Features

- 1) Small mold type. (UMD5)
- 2) High reliability

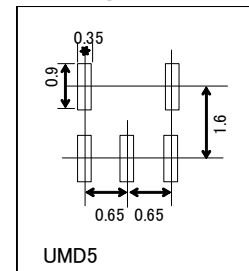
### ●Construction

Silicon epitaxial planar

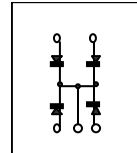
### ●External dimensions (Unit : mm)



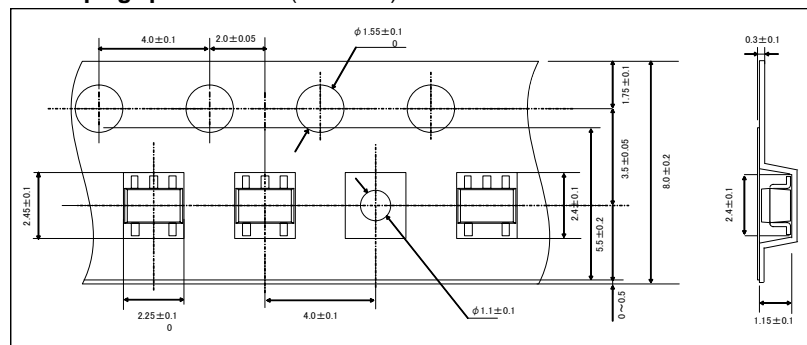
### ●Land size figure (Unit : mm)



### ●Structure



### ●Taping specifications (Unit : mm)



### ●Absolute maximum ratings (Ta=25°C)

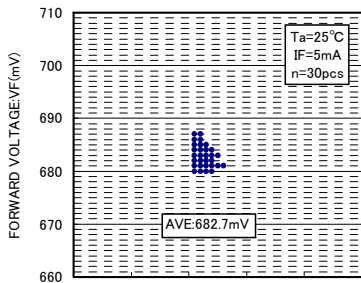
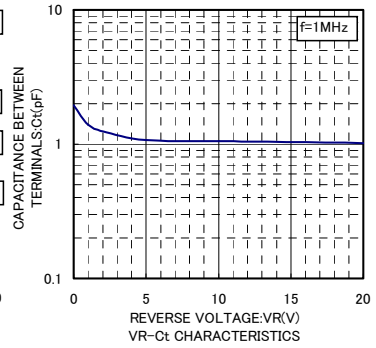
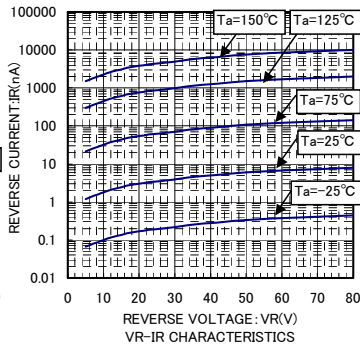
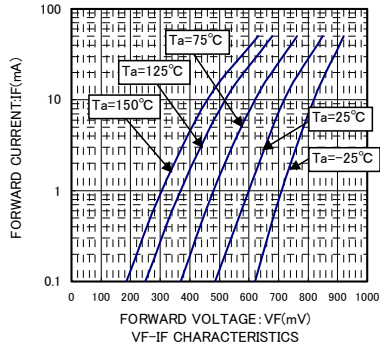
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	80	V
Reverse voltage (DC)	$V_R$	80	V
Forward current (Single)	$I_{FM}$	80	mA
Average rectified forward current (Single)	$I_o$	25	mA
Surge current (t=1us)	$I_{surge}$	250	mA
Power dissipation	$P_d$	150	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

### ●Electrical characteristics (Ta=25°C)

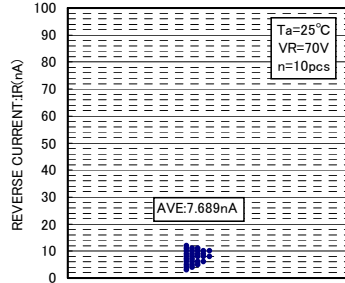
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.9	V	$I_F=5mA$
Reverse current	$I_R$	-	-	0.1	μA	$V_R=70V$
Capacitance between terminals	$C_t$	-	-	3.5	pF	$V_R=6V, f=1MHz$
Reverse recovery time	$t_{rr}$	-	-	4	ns	$V_R=6V, I_F=5mA, R_L=50\Omega$

Diodes

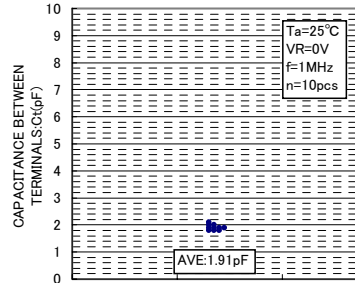
●Electrical characteristic curves (Ta=25°C)



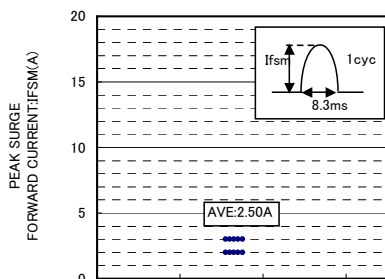
VF DISPERSION MAP



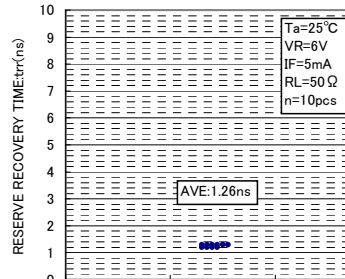
IR DISPERSION MAP



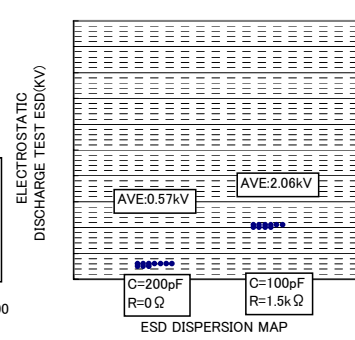
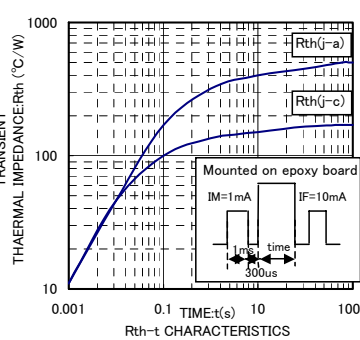
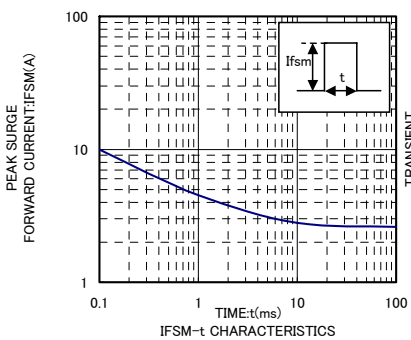
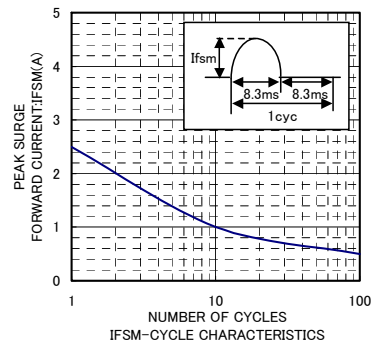
Ct DISPERSION MAP



IFSM DISERSION MAP



trr DISPERSION MAP



ESD DISPERSION MAP

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