

# Switching diode

## RF051VA1S

### ●Applications

High frequency rectification

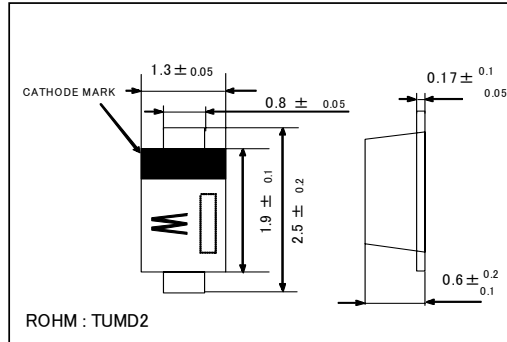
### ●Features

- 1) Surface mounting type (TUMD2)
- 2) Very fast recovery.
- 3) High reliability.

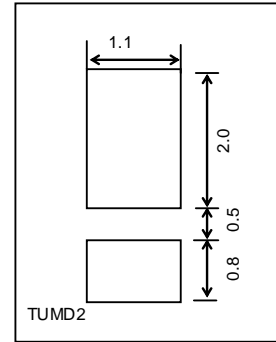
### ●Structure

Silicon epitaxial planar

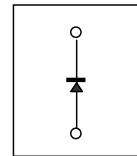
### ●Dimensions (Unit : mm)



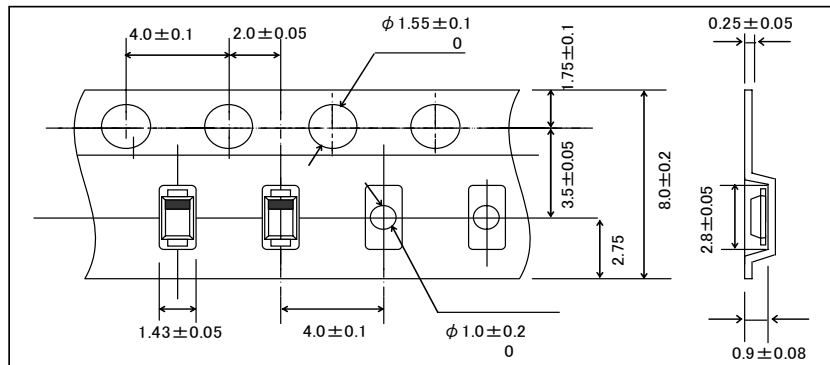
### ●Land size figure (Unit : mm)



### ●Structure



### ●Taping dimensions (Unit : mm)



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

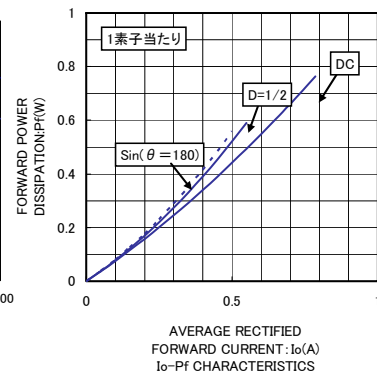
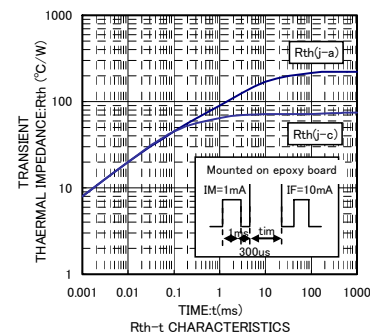
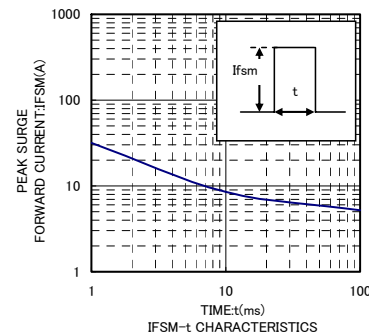
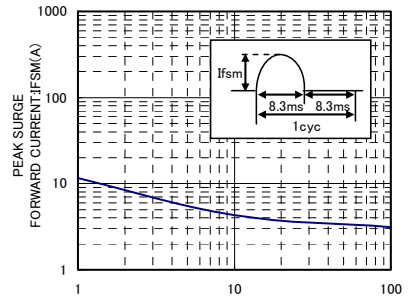
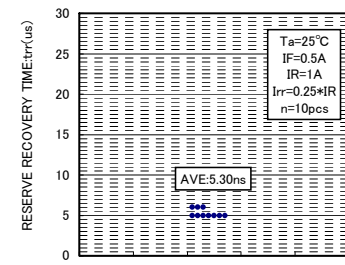
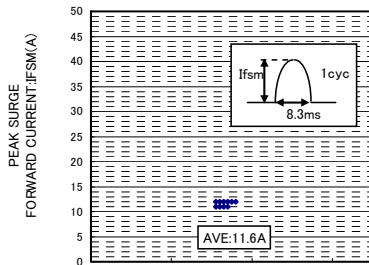
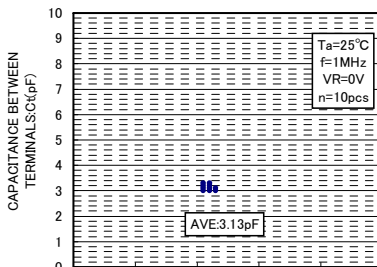
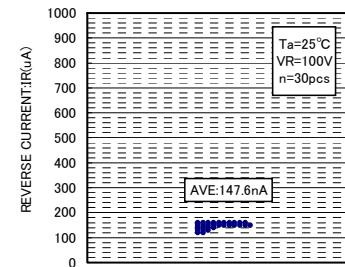
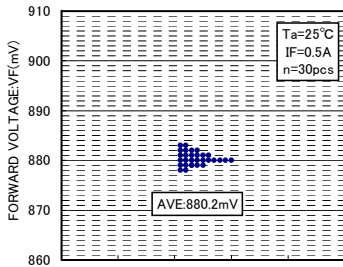
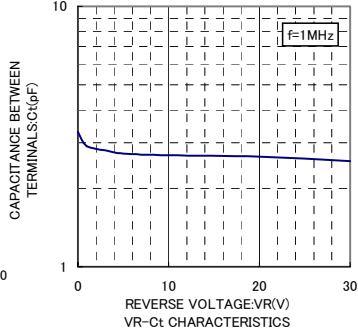
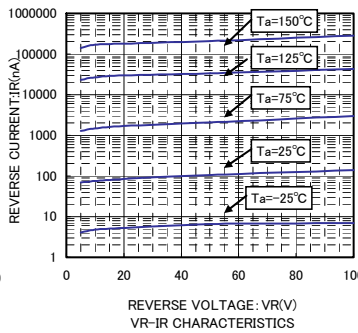
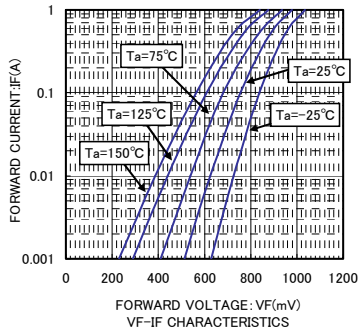
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	100	V
Reverse voltage (DC)	$V_R$	100	V
Average rectified forward current	$I_o$	0.5	A
Forward current surge peak (60Hz·1cyc)	$I_{FSM}$	5	A
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

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

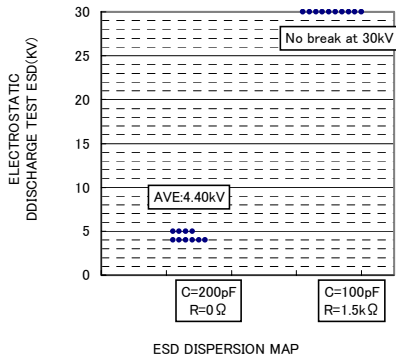
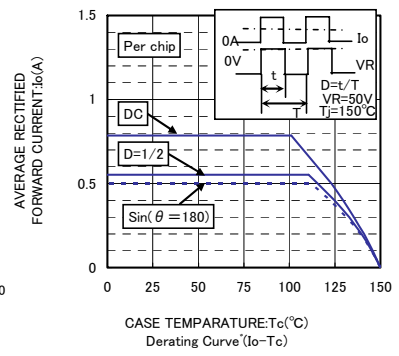
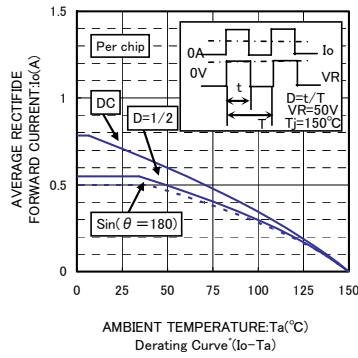
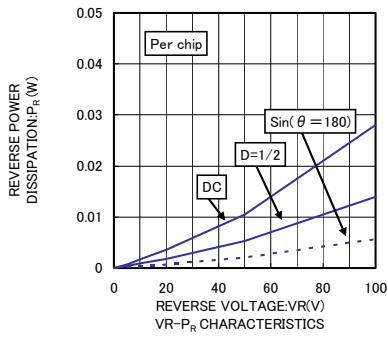
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.98	V	$I_F=0.5A$
Reverse current	$I_R$	-	-	10	μA	$I_F=100V$
Reverse recovery time	$t_{rr}$	-	-	25	nA	$I_F=0.5A, I_R=1.0A, I_{rr}=0.25 \cdot I_R$

Diodes

●Electrical characteristic curves



Diodes



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