

Switching diode

RF051VA1S

●Applications

High frequency rectification

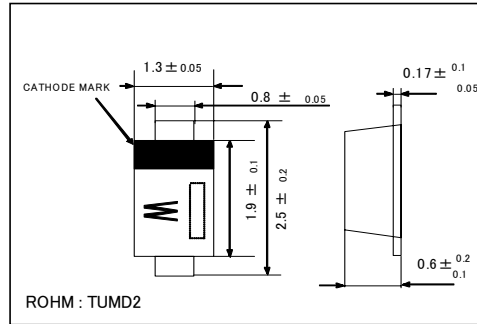
●Features

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

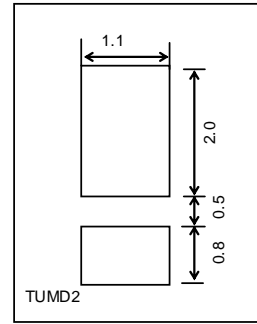
●Structure

Silicon epitaxial planar

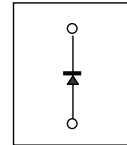
●Dimensions (Unit : mm)



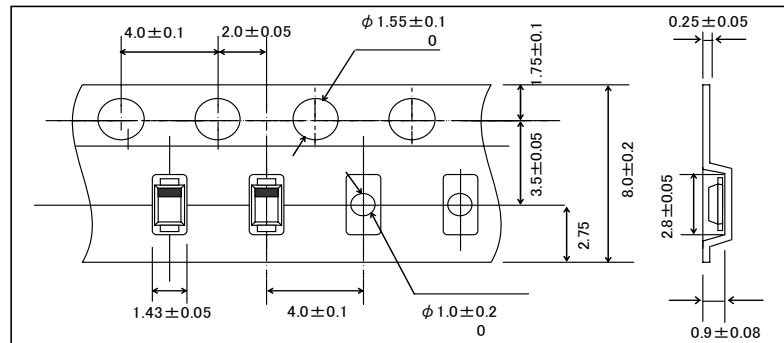
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

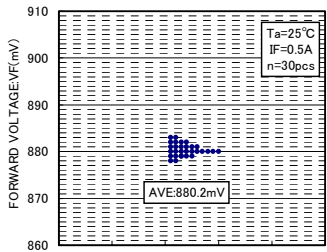
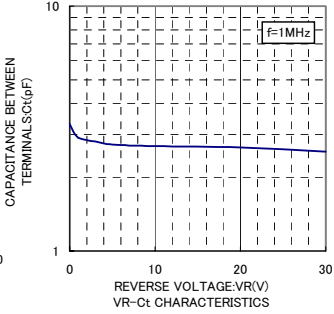
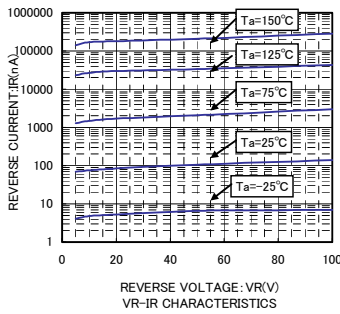
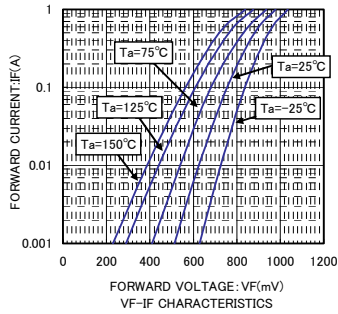
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	100	V
Reverse voltage (DC)	V_R	100	V
Average rectified forward current	I_o	0.5	A
Forward current surge peak (60Hz·1cyc)	I_{FSM}	5	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

●Electrical characteristic (Ta=25°C)

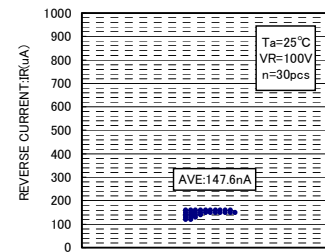
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.98	V	$I_F=0.5A$
Reverse current	I_R	-	-	10	μA	$I_F=100V$
Reverse recovery time	t_{rr}	-	-	25	nA	$I_F=0.5A, I_R=1.0A, I_{rr}=0.25 \cdot I_R$

Diodes

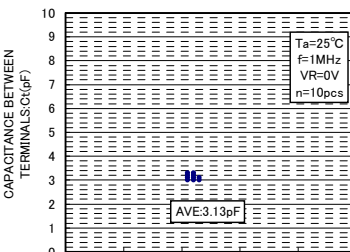
●Electrical characteristic curves



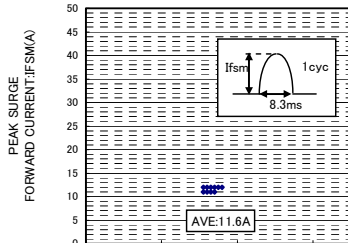
VF DISPERSION MAP



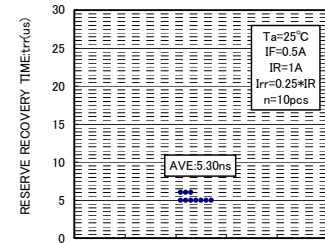
IR DISPERSION MAP



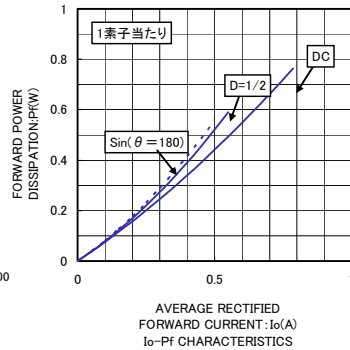
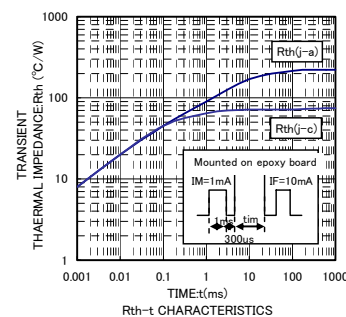
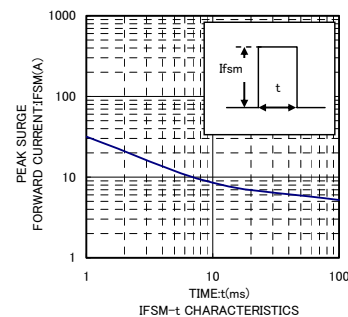
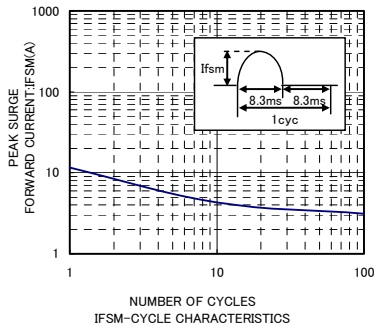
Ct DISPERSION MAP



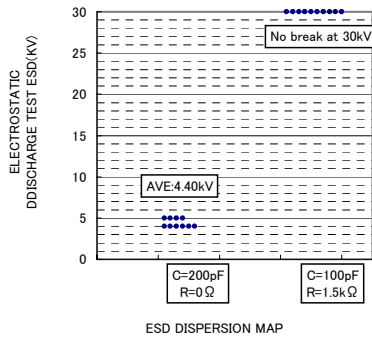
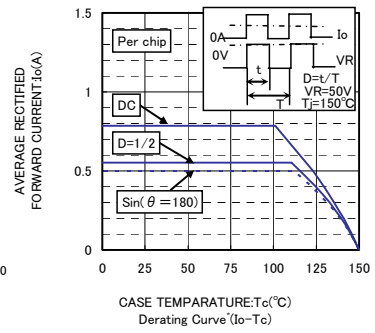
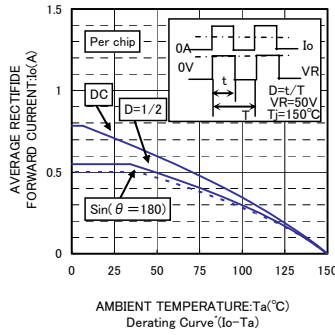
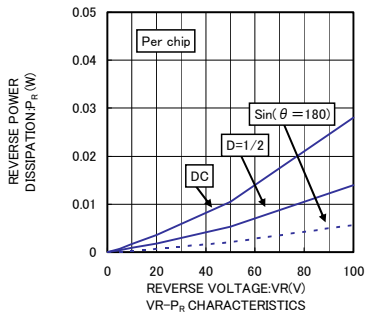
IFSM DISERSION MAP



trr DISPERSION MAP



Diodes



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