

Super Fast Recovery Diode

RF04UA2D

●Series

Standard Fast Recovery

●Applications

High frequency rectifier

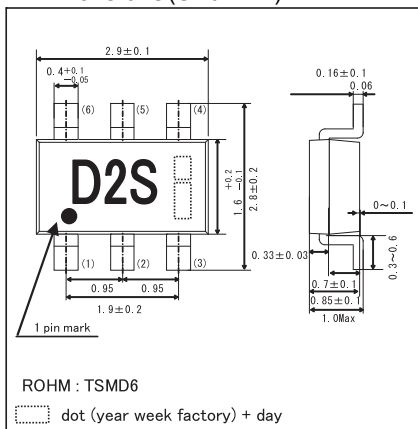
●Features

- 1)Surface mounting type (TSM6)
- 2)High reliability

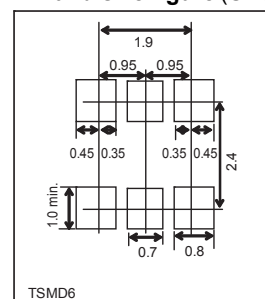
●Construction

Silicon epitaxial planer

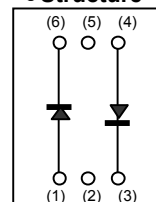
●Dimensions (Unit : mm)



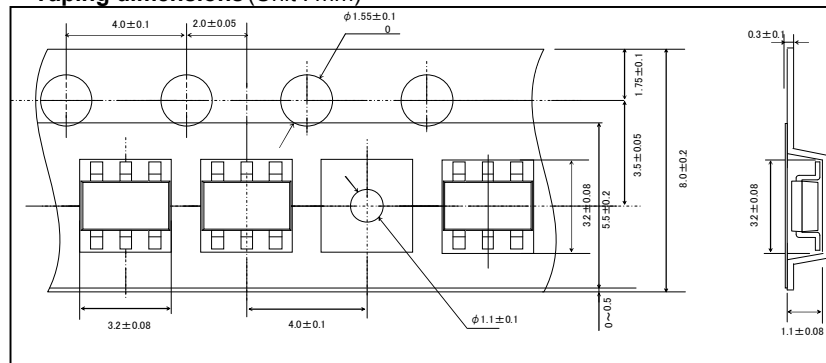
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

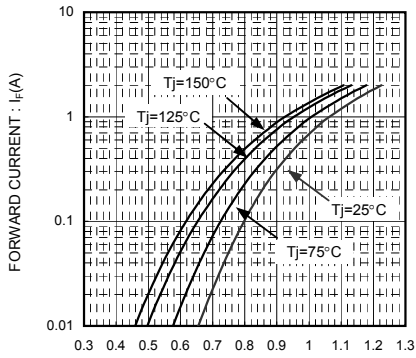
Parameter	Symbol	Conditions	Limits	Unit	
Repetitive peak Reverse voltage	V_{RM}		200	V	
Reverse voltage	V_R	Direct voltage	200	V	
Average rectified forward current	$I_{o/2}$	Glass epoxy substrate mounted 60Hz half sin wave, resistive load	$T_a=25^\circ C$ $T_c=130^\circ C$	0.4	A
Forward current surge peak	I_{FSM}	60Hz half sin wave, Non-repetitive one cycle peak value, $T_j=25^\circ C$	1	A	
Junction temperature	T_j		150	°C	
Storage temperature	T_{stg}		-40 to +150	°C	

(* Standard of per diode)

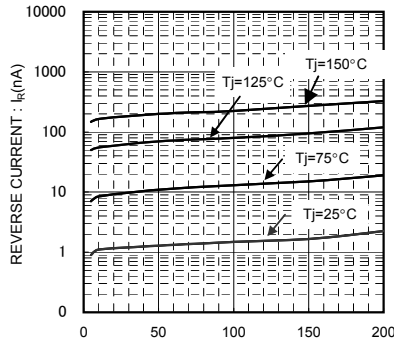
●Electrical characteristics (Tj=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F=0.2A$	—	0.86	0.98	V
Reverse current	I_R	$V_R=200V$	—	0.01	10	μA
Reverse recovery time	t_{rr}	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \times I_R$	—	11	25	ns

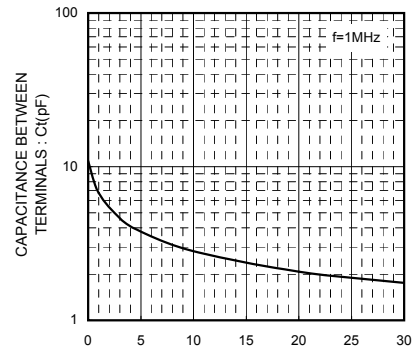
●Electrical characteristics curves



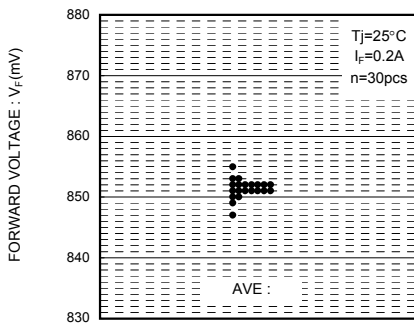
FORWARD VOLTAGE : V_f (V)
 V_f - I_f CHARACTERISTICS



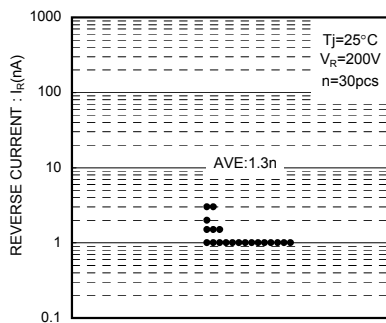
REVERSE VOLTAGE : V_r (V)
 V_r - I_r CHARACTERISTICS



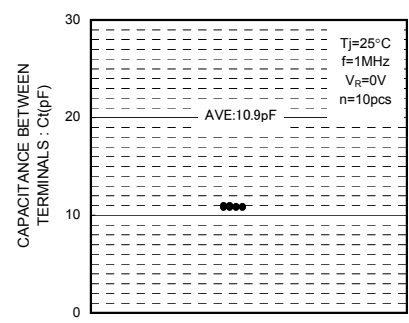
REVERSE VOLTAGE : V_r (V)
 V_r - C_t CHARACTERISTICS



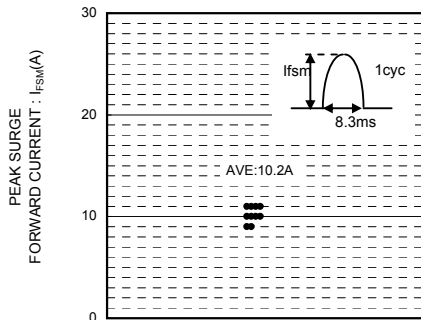
V_f DISPERSION MAP



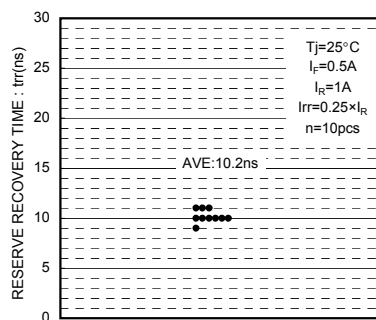
I_r DISPERSION MAP



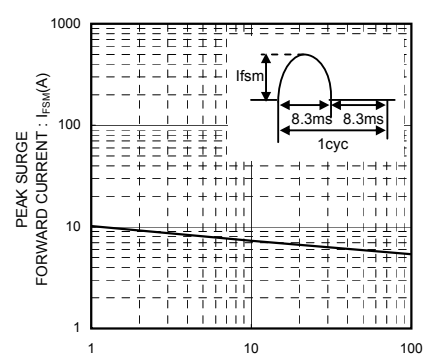
C_t DISPERSION MAP



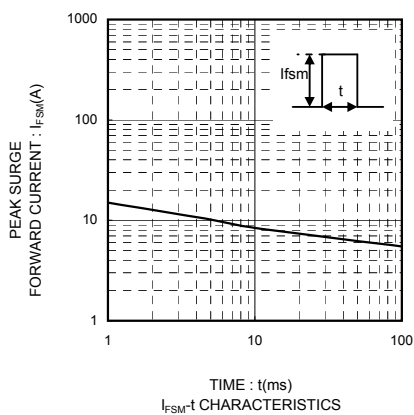
I_{FSM} DISPERSION MAP



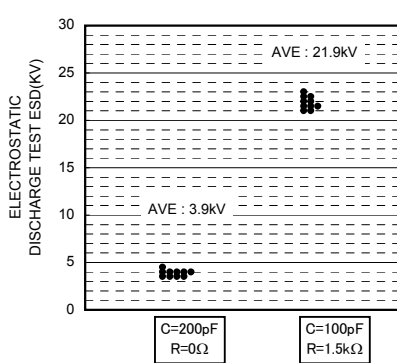
t_{rr} DISPERSION MAP



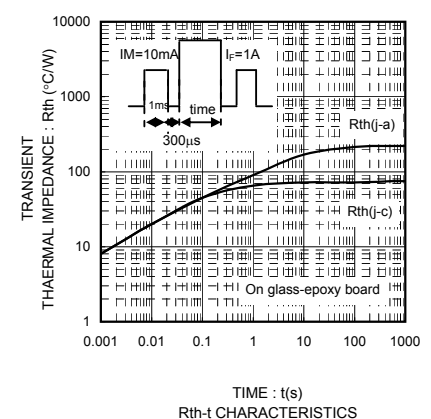
NUMBER OF CYCLES
 I_{FSM} CYCLE CHARACTERISTICS



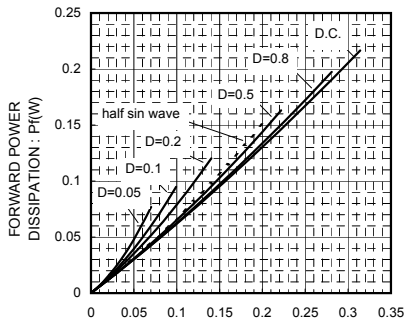
TIME : t (ms)
 I_{FSM} - t CHARACTERISTICS



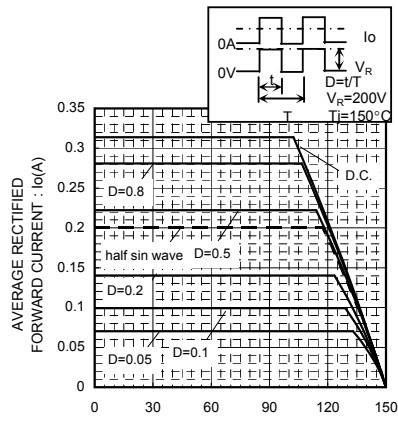
ESD DISPERSION MAP



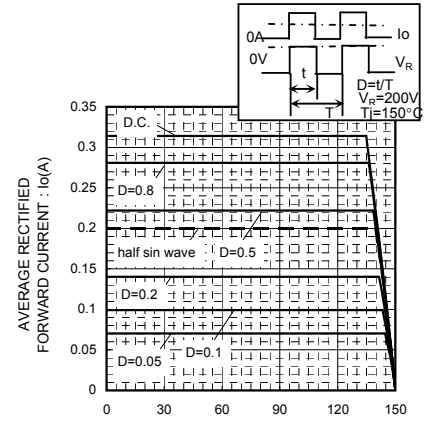
TIME : t (s)
 R_{th} - t CHARACTERISTICS



AVERAGE RECTIFIED
FORWARD CURRENT : I_o(A)
I_o-P_F CHARACTERISTICS



AMBIENT TEMPERATURE : T_a(°C)
Derating Curve*(I_o-T_a)



CASE TEMPERATURE : T_c(°C)
Derating Curve(I_o-T_c)

Notes

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