

Super Fast Recovery Diode

RFUS20NS6S

●Series

Ultra Fast Recovery

●Applications

General rectification

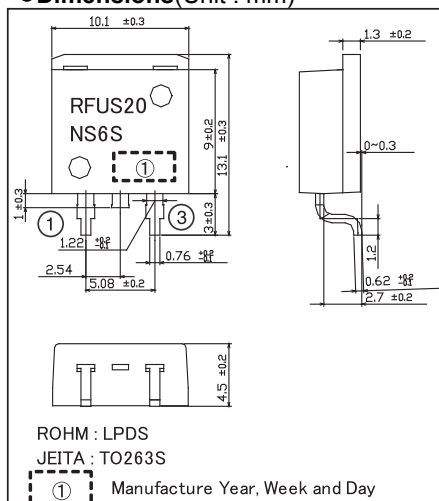
●Features

- 1) Ultra low switching loss
- 2) High current overload capacity
- 3) Cathode common single type

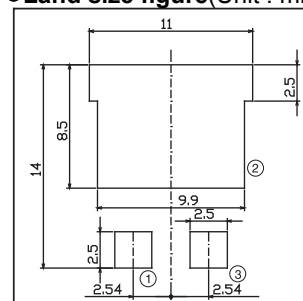
●Construction

Silicon epitaxial planer

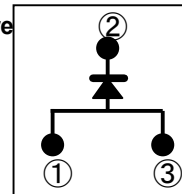
●Dimensions(Unit : mm)



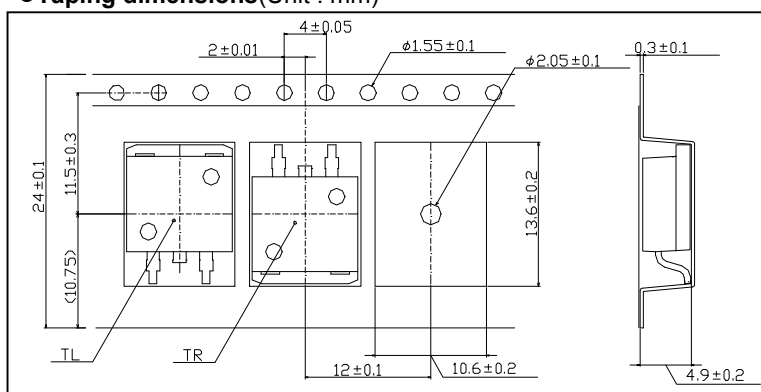
●Land size figure(Unit : mm)



●Structure



●Taping dimensions(Unit : mm)



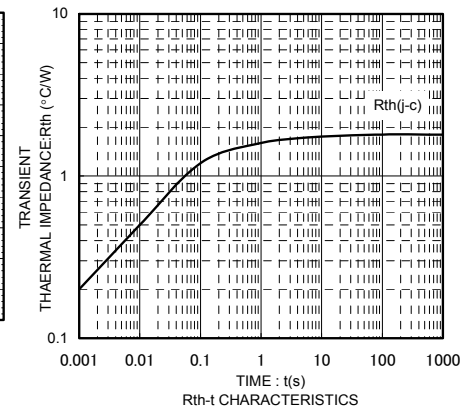
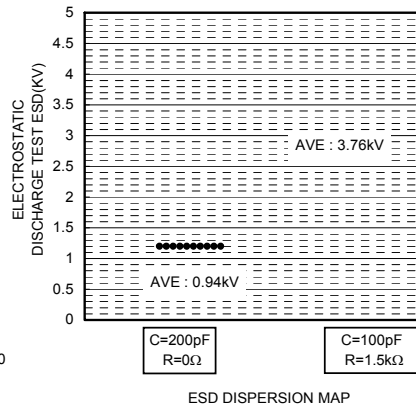
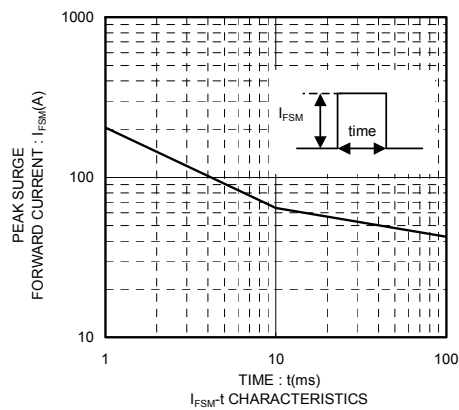
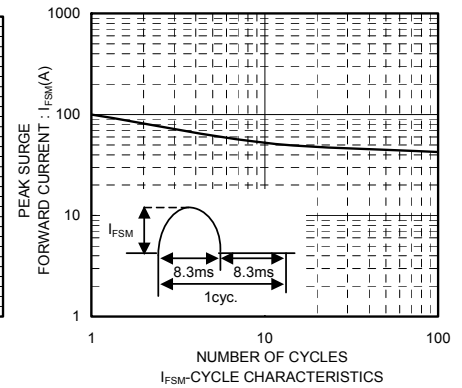
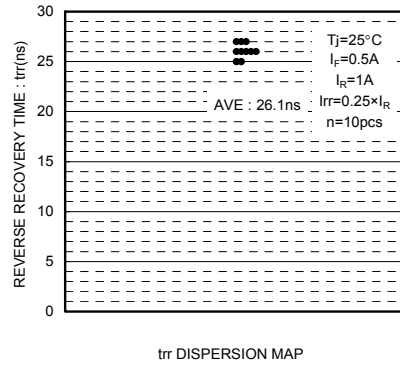
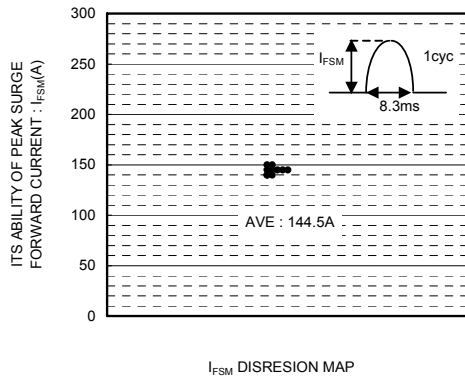
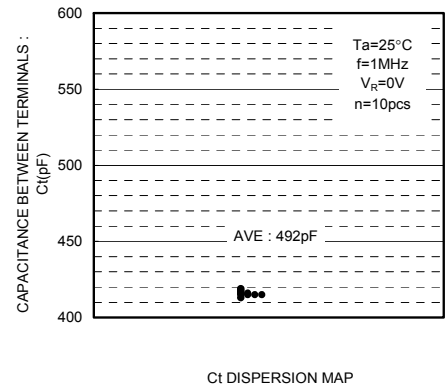
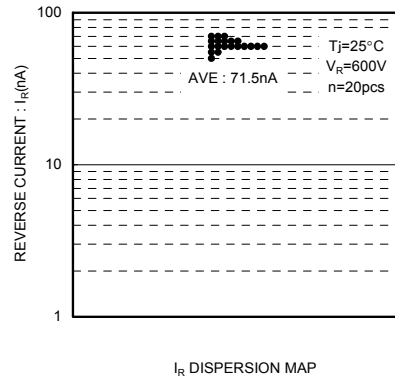
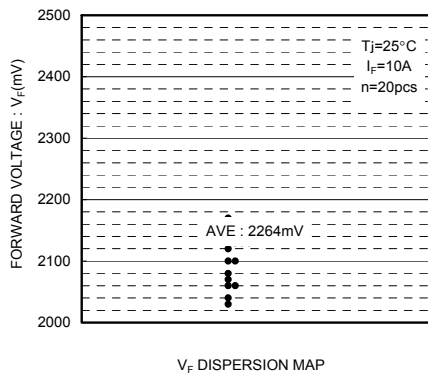
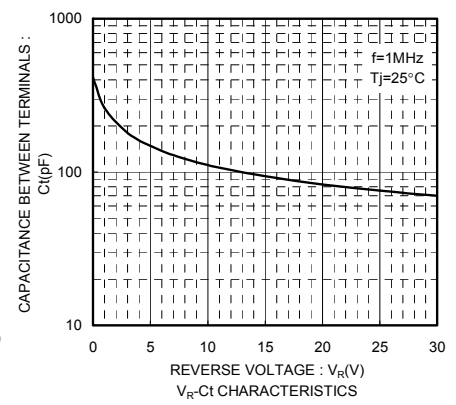
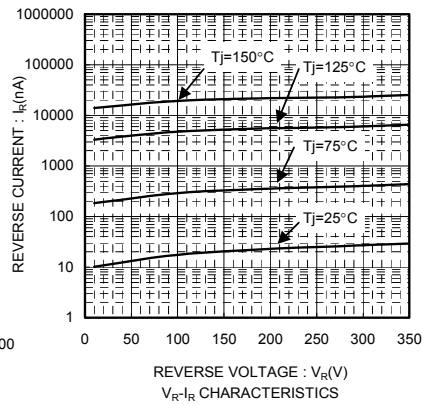
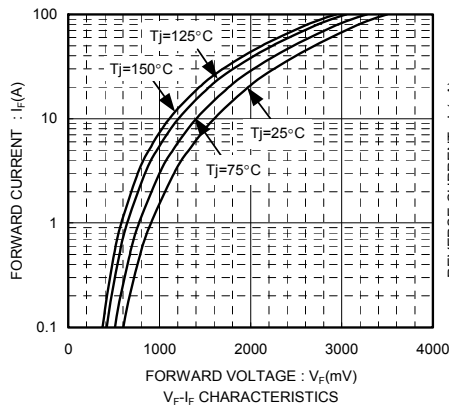
●Absolute maximum ratings(Tc=25°C)

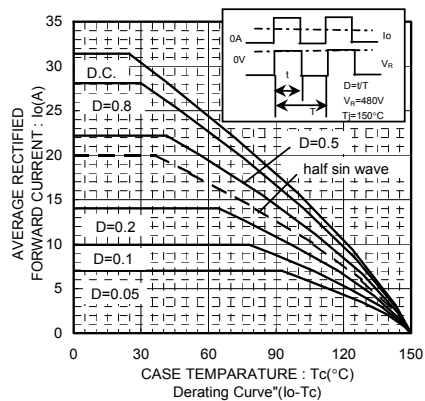
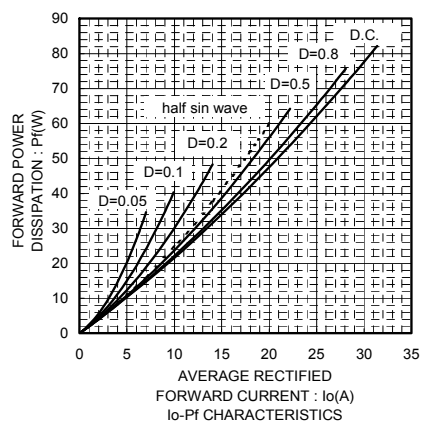
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V_{RM}	Duty ≤ 0.5	600	V
Reverse voltage	V_R	Direct voltage	600	V
Average rectified forward current	I_o	60Hz half sin wave resistive load , 1/2 I_o per diode	20	A
Forward current surge peak	I_{FSM}	60Hz half sin wave, Non-repetitive one cycle peak value, $T_j = 25^\circ\text{C}$	100	A
Junction temperature	T_j		150	°C
Storage temperature	T_{stg}		-55 to +150	°C

●Electrical characteristics(Tj=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F = 20\text{A}$	-	2.4	2.8	V
Reverse current	I_R	$V_R = 600\text{V}$	-	0.05	10	μA
Reverse recovery time	t_{rr}	$I_F = 0.5\text{A}, I_R = 1\text{A}, I_{rr} = 0.25 \times I_R$	-	23	35	ns
Thermal resistance	$R_{th(j-c)}$	junction to case	-	-	2	°C/W

●Electrical characteristic curves





Notes

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