

Super Fast Recovery Diode

RFUS20NS6S

●Series

Ultra Fast Recovery

●Applications

General rectification

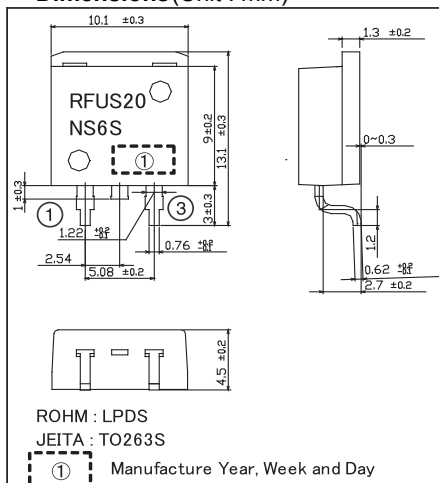
●Features

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

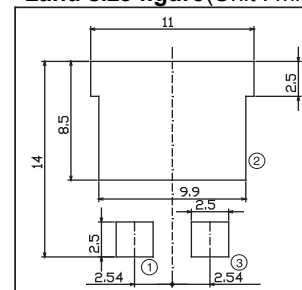
●Construction

Silicon epitaxial planer

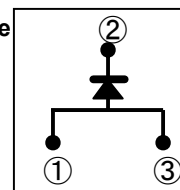
●Dimensions (Unit : mm)



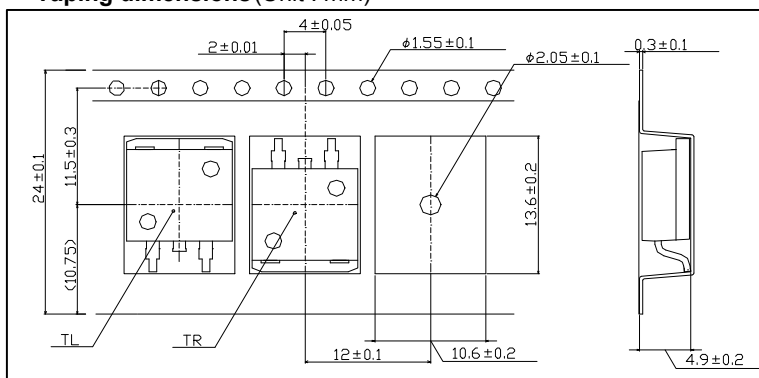
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



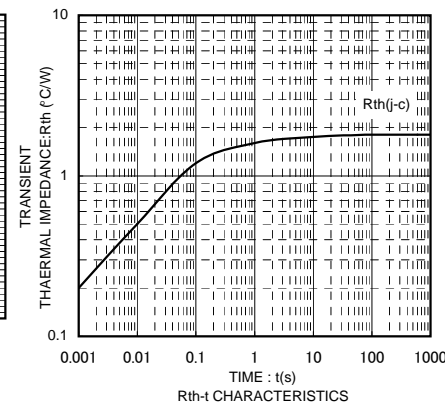
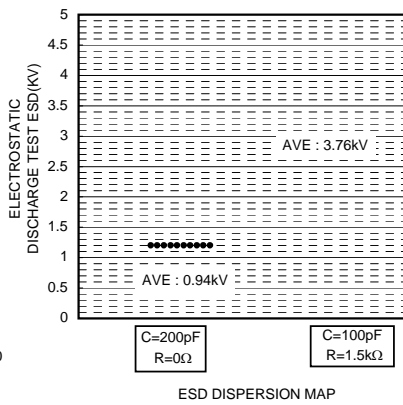
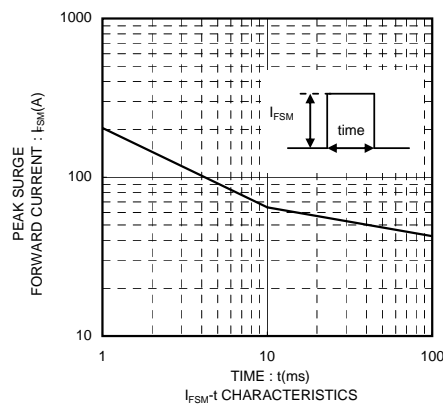
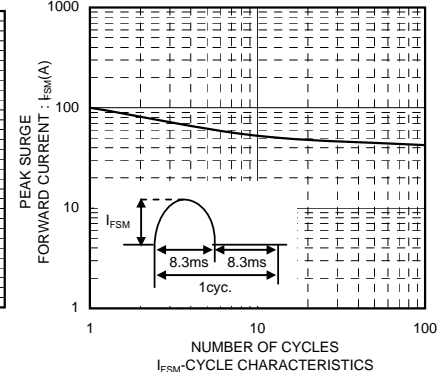
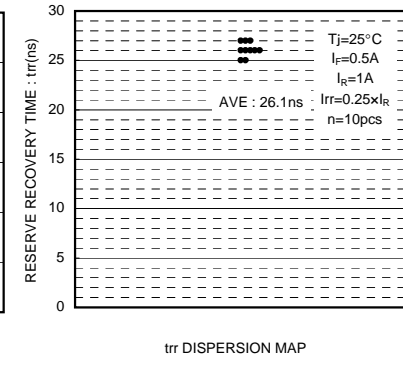
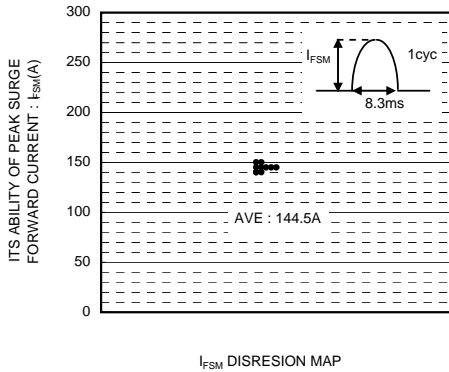
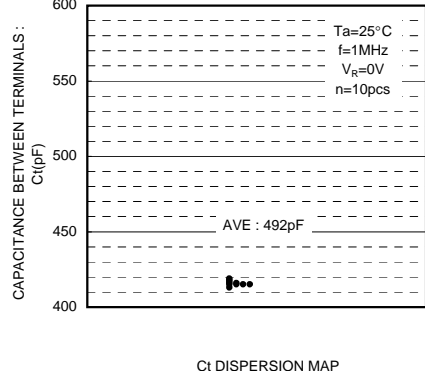
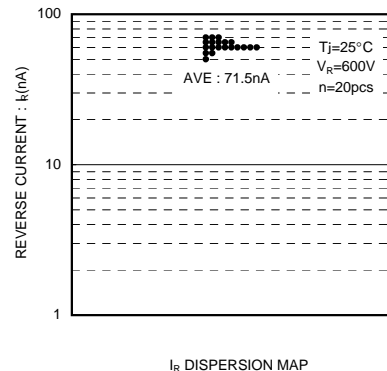
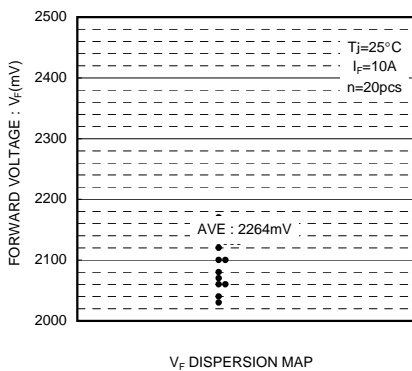
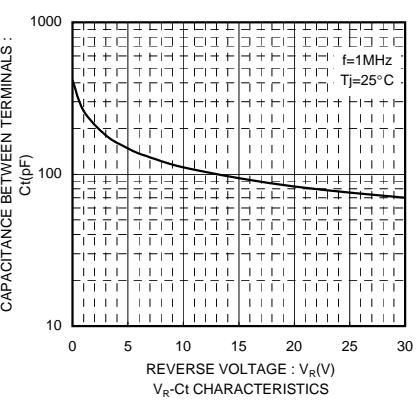
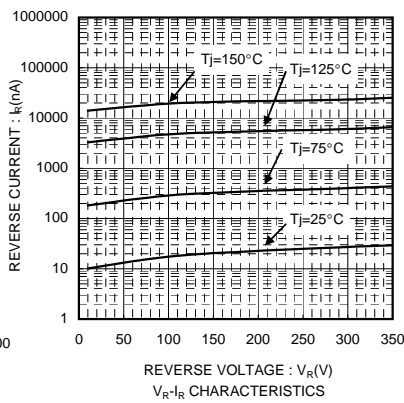
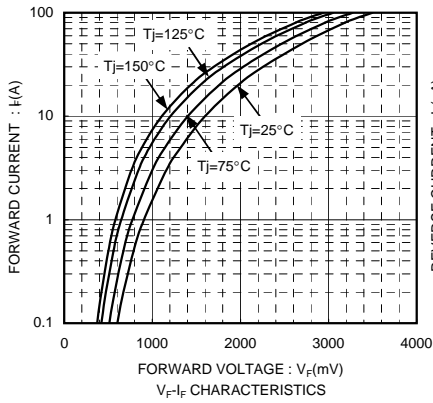
●Absolute maximum ratings (Tc=25°C)

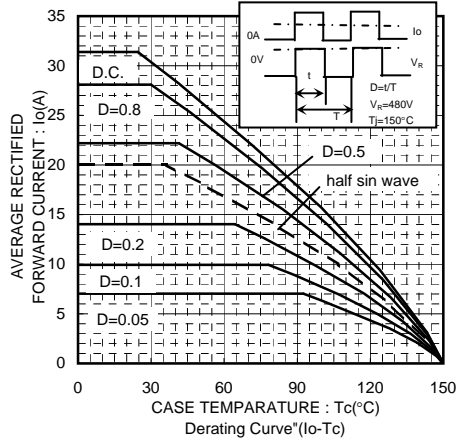
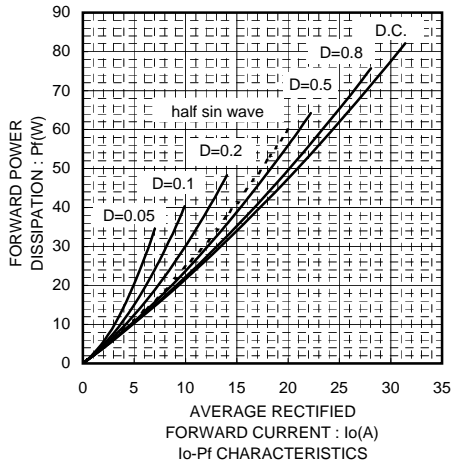
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V_{RM}	Duty \leq 0.5	600	V
Reverse voltage	V_R	Direct voltage	600	V
Average rectified forward current	I_o	60Hz half sin wave resistive load , 1/2 I_o per diode	$T_c=36^\circ C$ 20	A
Forward current surge peak	I_{FSM}	60Hz half sin wave, Non-repetitive one cycle peak value, $T_j=25^\circ C$	100	A
Junction temperature	T_j		150	°C
Storage temperature	T_{stg}		-55to+150	°C

●Electrical characteristics (Tj=25°C)

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

●Electrical characteristic curves





Notes

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