

Super Fast Recovery Diode

RFUS20NS6S

●Series

Ultra Fast Recovery

●Applications

General rectification

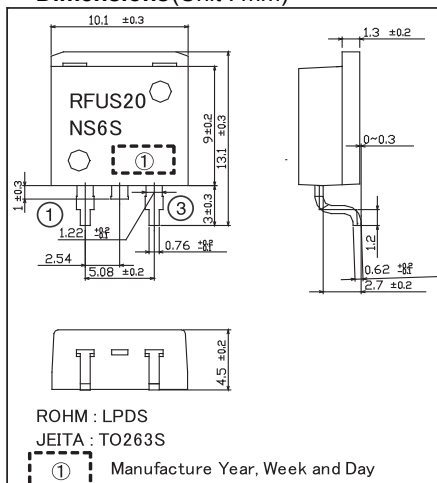
●Features

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

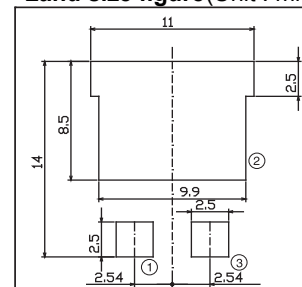
●Construction

Silicon epitaxial planer

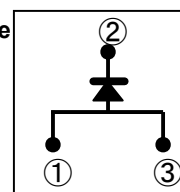
●Dimensions (Unit : mm)



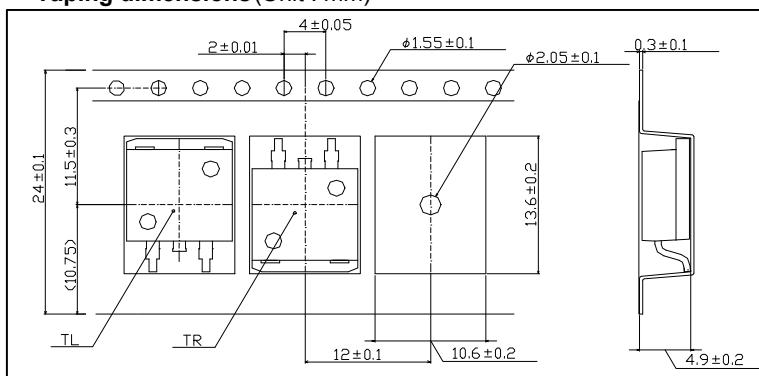
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



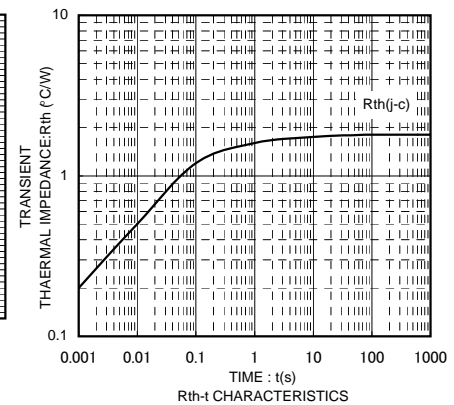
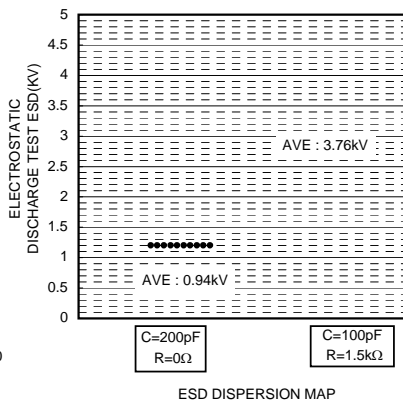
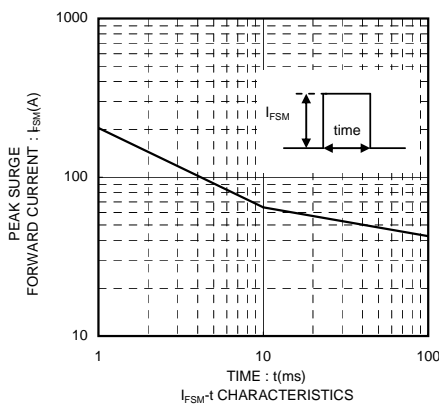
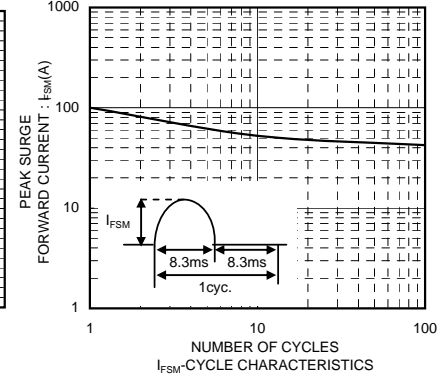
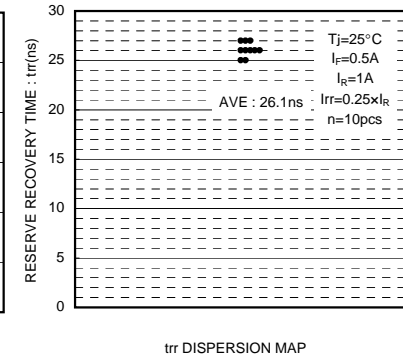
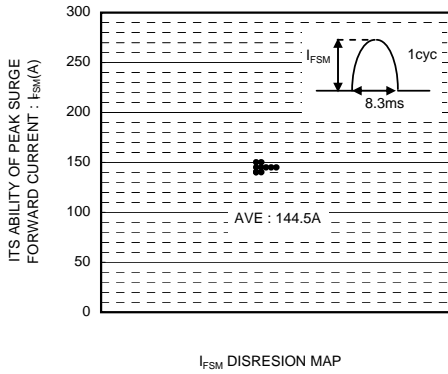
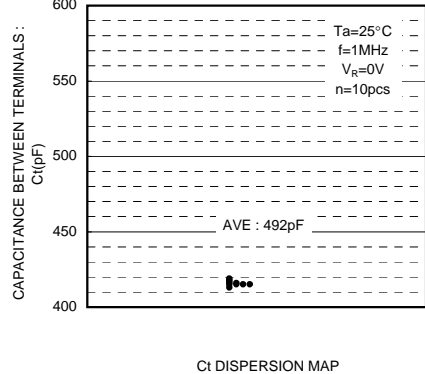
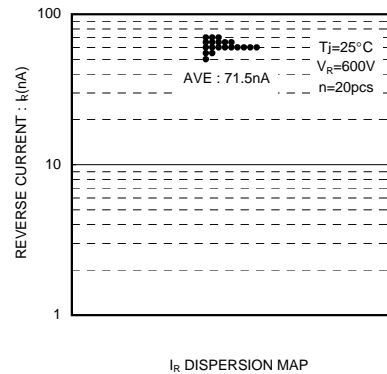
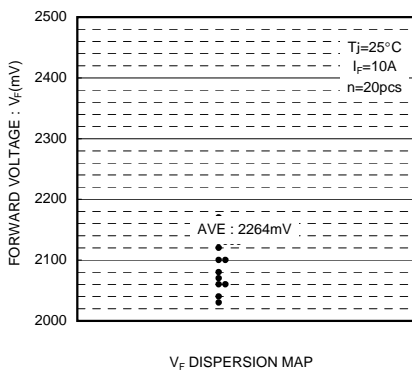
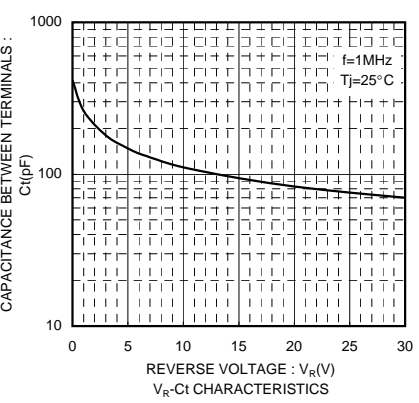
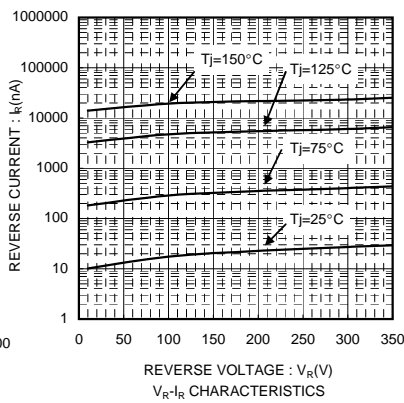
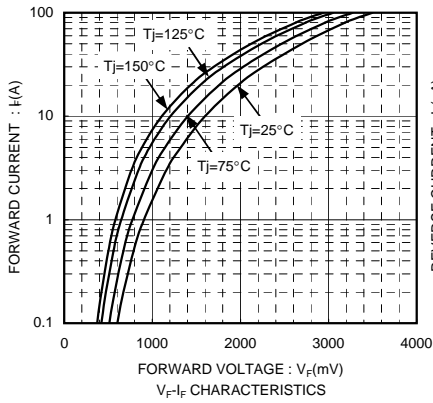
●Absolute maximum ratings (T_c=25°C)

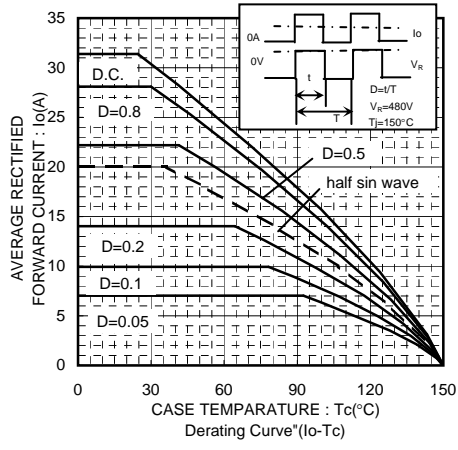
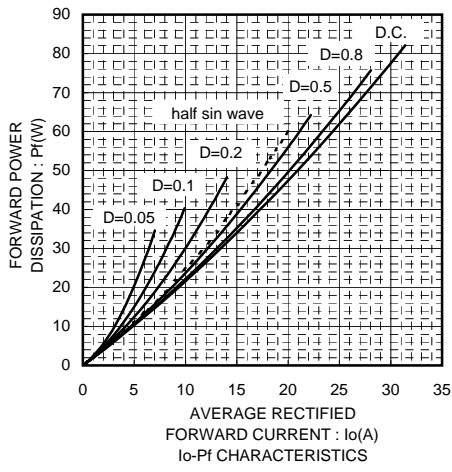
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V _{RM}	Duty ≤ 0.5	600	V
Reverse voltage	V _R	Direct voltage	600	V
Average rectified forward current	I _o	60Hz half sin wave resistive load , 1/2 I _o per diode	T _c =36°C 20	A
Forward current surge peak	I _{FSM}	60Hz half sin wave, Non-repetitive one cycle peak value, T _j =25°C	100	A
Junction temperature	T _j		150	°C
Storage temperature	T _{stg}		-55to+150	°C

●Electrical characteristics (T_j=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	tr _r	I _F =0.5A, I _R =1A, I _{rr} =0.25×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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