

# Super Fast Recovery Diode

## RF1501NS3S

### ●Series

Ultra Fast Recovery

### ●Applications

General rectification

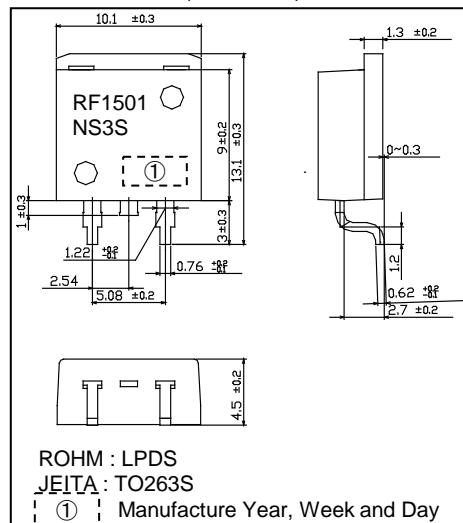
### ●Features

- 1)Ultra low switching loss
- 2)High current overload capacity

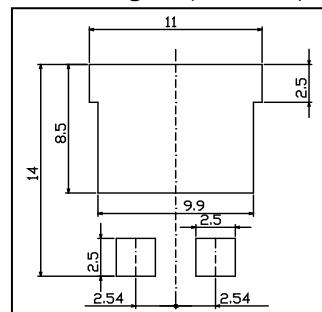
### ●Construction

Silicon epitaxial planer

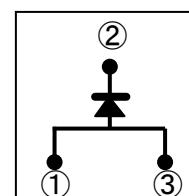
### ●Dimensions (Unit : mm)



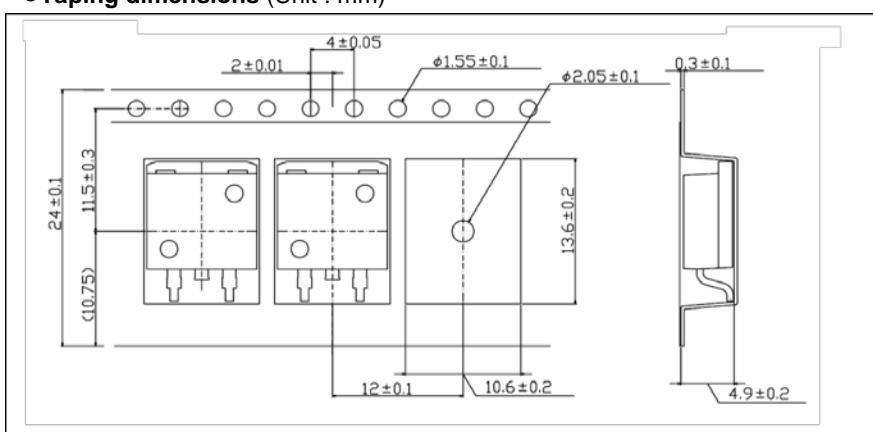
### ●Land size figure (Unit : mm)



### ●Structure



### ●Taping dimensions (Unit : mm)

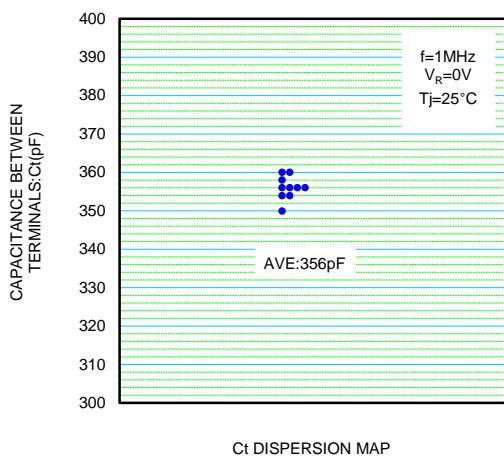
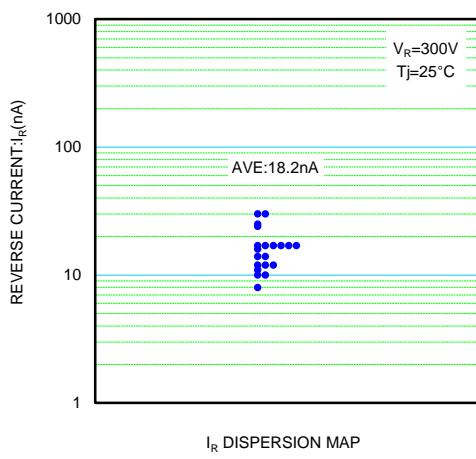
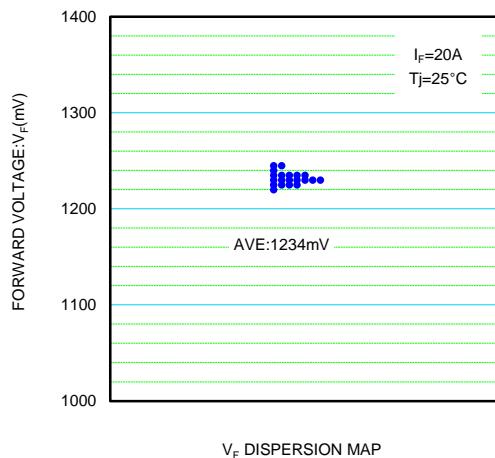
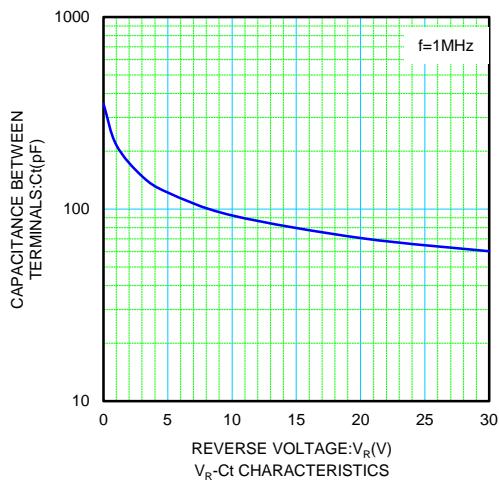
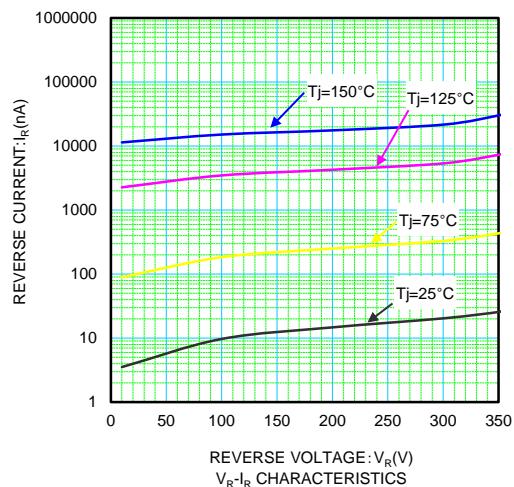
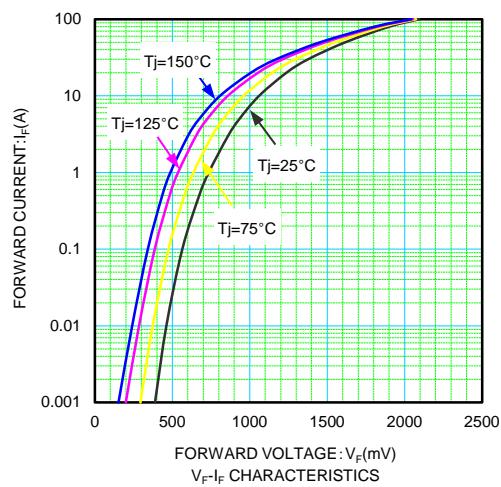


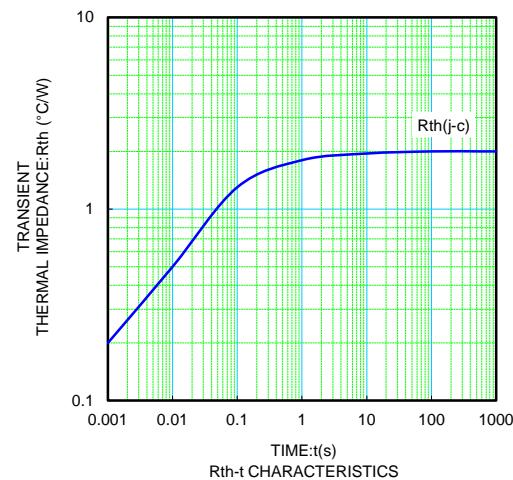
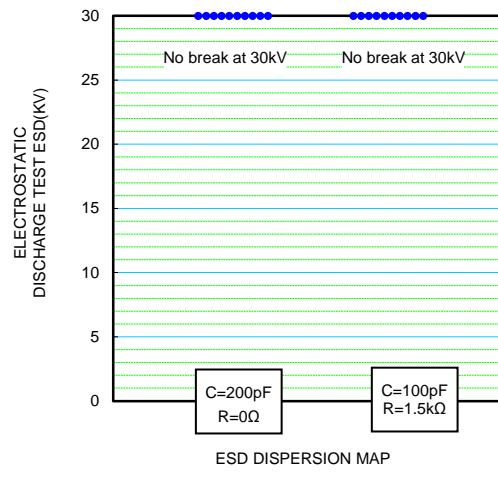
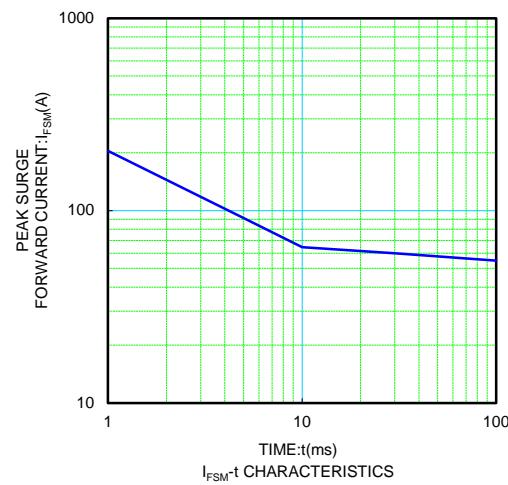
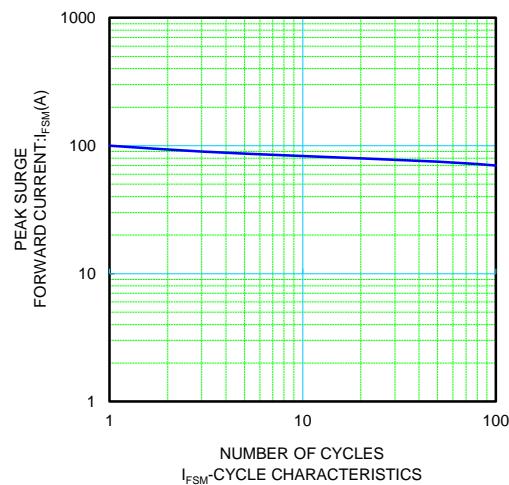
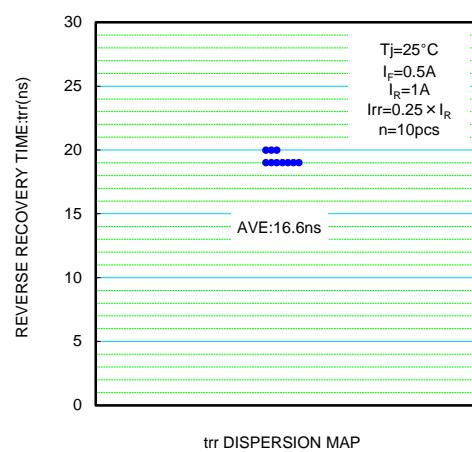
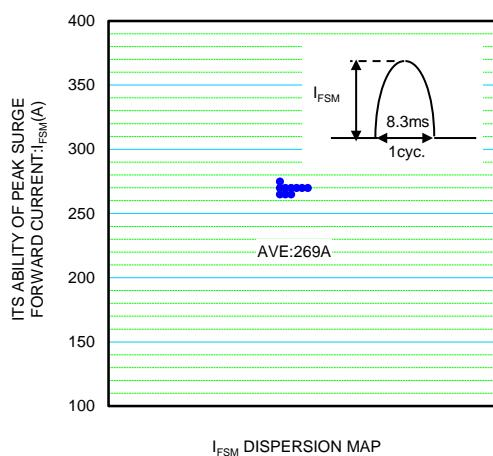
### ●Absolute maximum ratings (Tc=25°C)

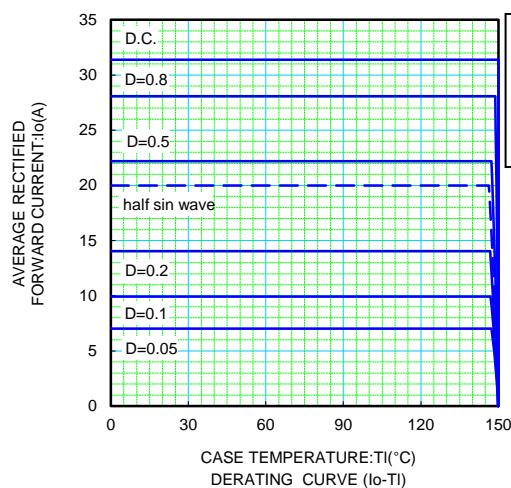
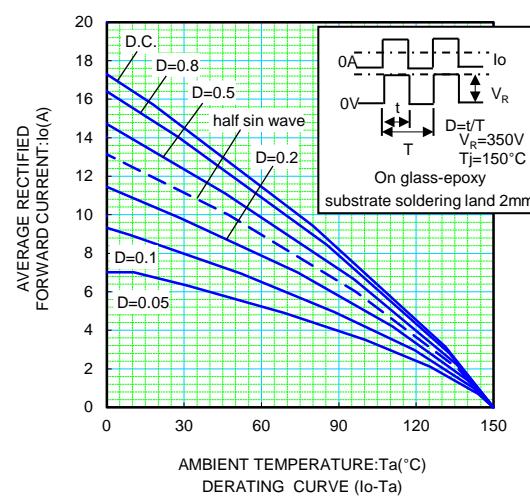
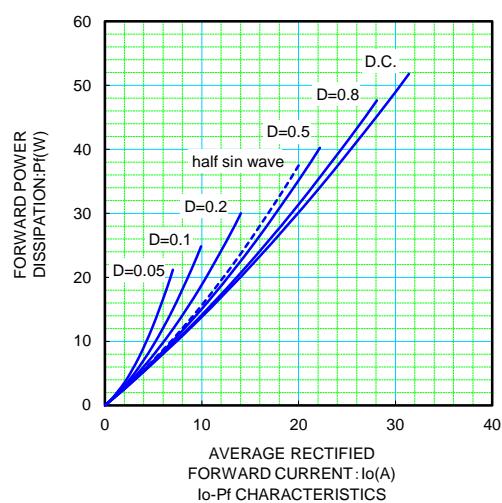
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V <sub>RM</sub>	Duty≤0.5	350	V
Reverse voltage	V <sub>R</sub>	Direct voltage	300	V
Average rectified forward current	I <sub>o</sub>	60Hz half sin wave resistive load at Tc=54°C	20	A
Forward current surge peak	I <sub>FSM</sub>	60Hz half sin wave, Non-repetitive one cycle peak value, T <sub>j</sub> =25°C	100	A
Junction temperature	T <sub>j</sub>		150	°C
Storage temperature	T <sub>stg</sub>		-55 to +150	°C

### ●Electrical characteristics (T<sub>j</sub>=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =20A	—	1.35	1.5	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =300V	—	0.06	10	μA
Reverse recovery time	trr	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, I <sub>rr</sub> =0.25×I <sub>R</sub>	—	22	30	ns
Thermal resistance	R <sub>th(j-c)</sub>	junction to case	—	—	2.5	°C/W







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