

# Super Fast Recovery Diode

**RFUH20NS3S**
**●Series**

Super Fast Recovery

**●Applications**

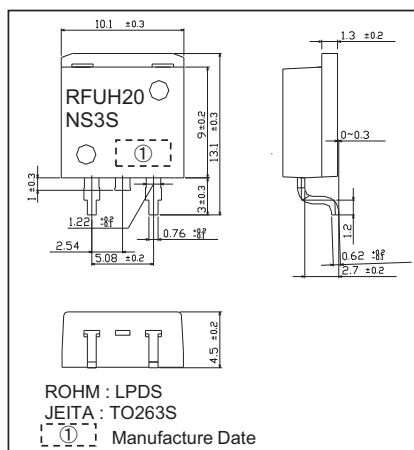
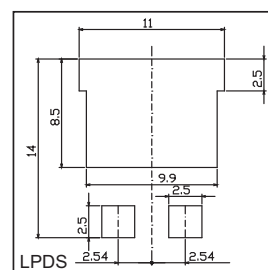
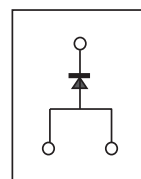
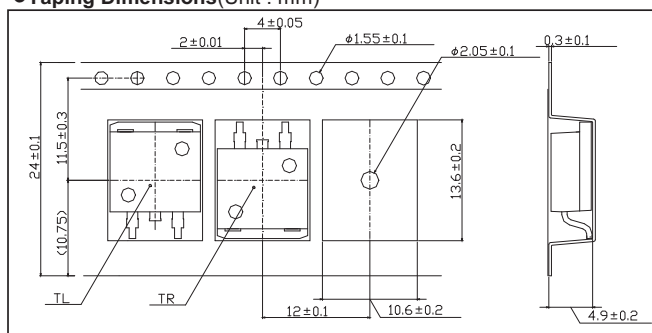
General rectification

**●Features**

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

**●Construction**

Silicon epitaxial planer type

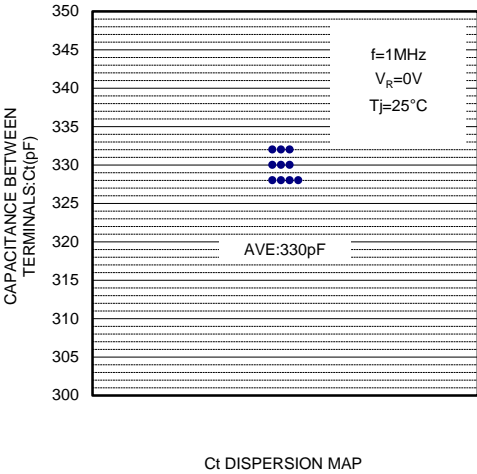
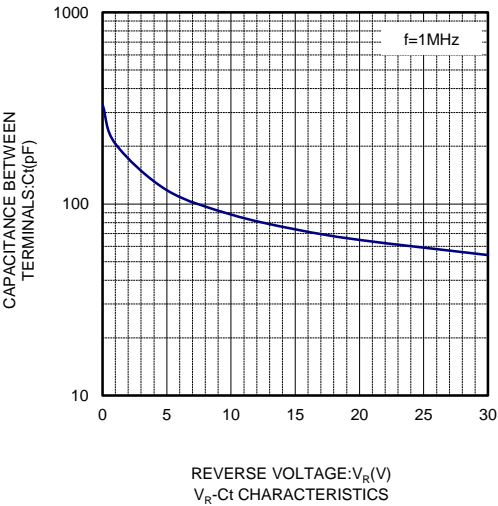
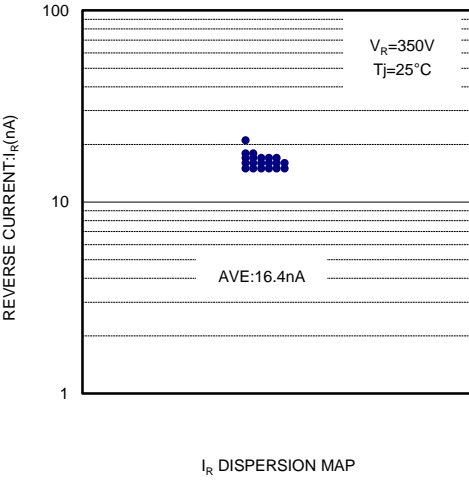
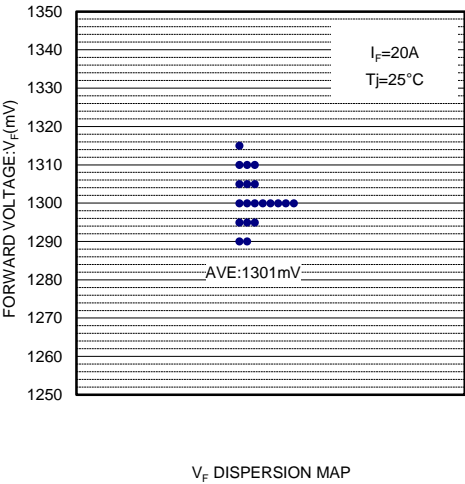
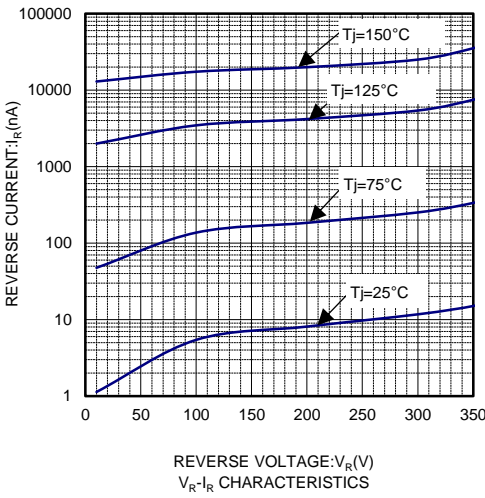
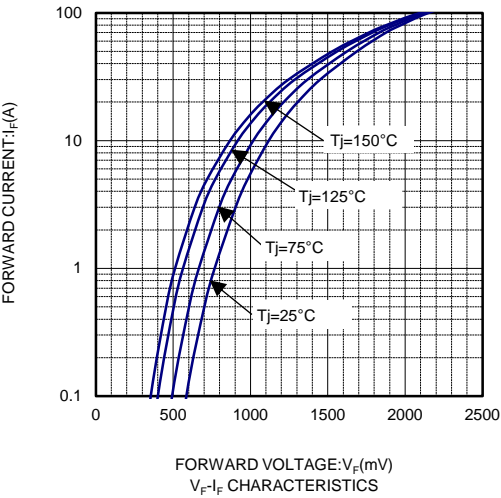
**●Dimensions(Unit : mm)**

**●Land Size Figure(Unit : mm)**

**●Structure**

**●Taping Dimensions(Unit : mm)**

**●Absolute Maximum Ratings(Tc=25°C)**

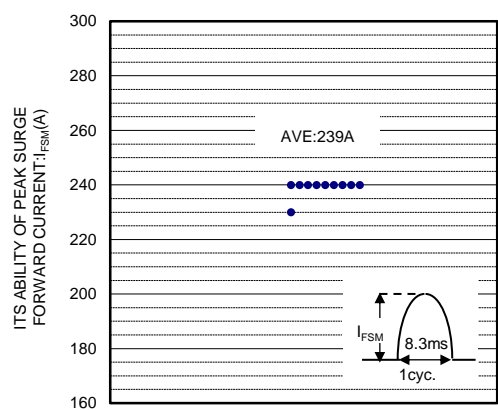
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	$V_{RM}$	Duty $\leq 0.5$	350	V
Reverse voltage	$V_R$	Direct voltage	350	V
Average rectified forward current	$I_o$	60Hz half sin wave , Resistive load Tc=32°C	20	A
Forward current surge peak	$I_{FSM}$	60Hz half sin wave , Non-repetitive at Tj=25°C (*1)	100	A
Junction temperature	Tj		150	°C
Storage temperature	Tstg		-55 to +150	°C

(\*1) 1-3pin common circuit

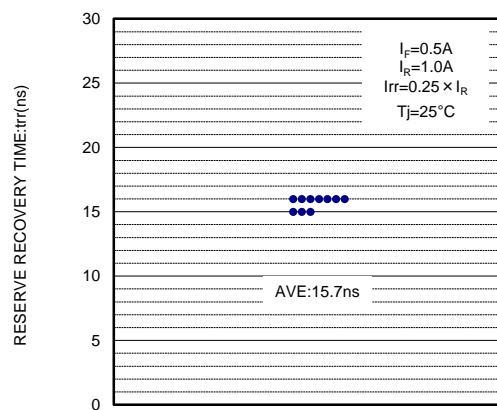
**●Electrical Characteristics(Tj=25°C)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	$V_F$	$I_F=20A$	—	1.3	1.5	V
Reverse current	$I_R$	$V_R=350V$	—	0.05	10	$\mu A$
Reverse recovery time	trr	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \times I_R$	—	16	25	ns
Thermal resistance	Rth(j-c)	Junction to case	—	—	3.0	°C/W

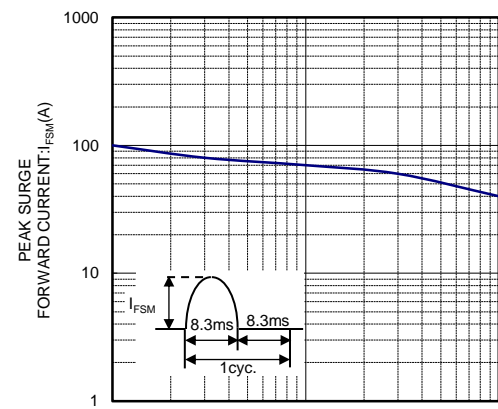




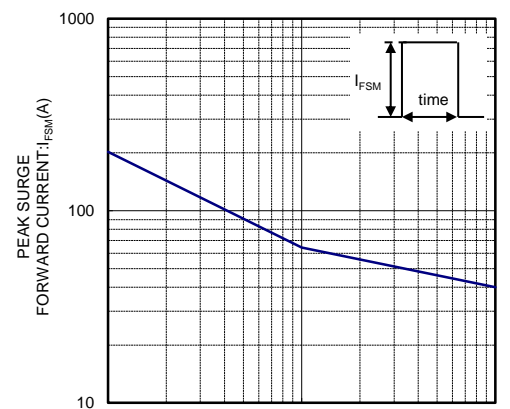
I\_FSM DISPERION MAP



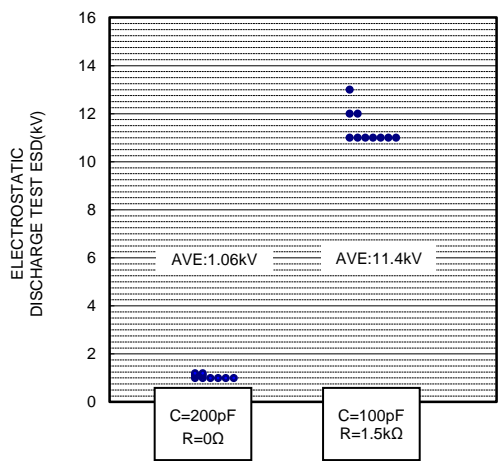
t\_rr DISPERION MAP



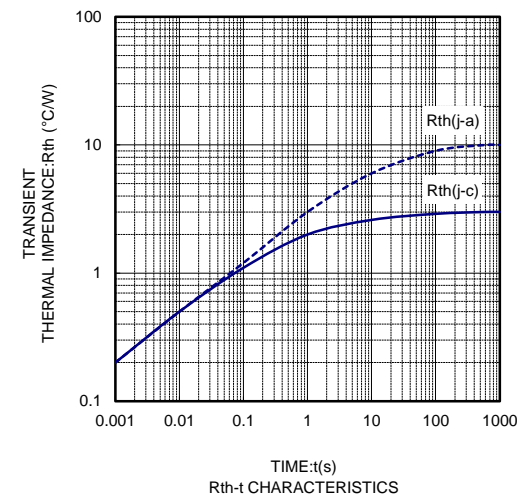
NUMBER OF CYCLES  
I\_FSM-CYCLE CHARACTERISTICS



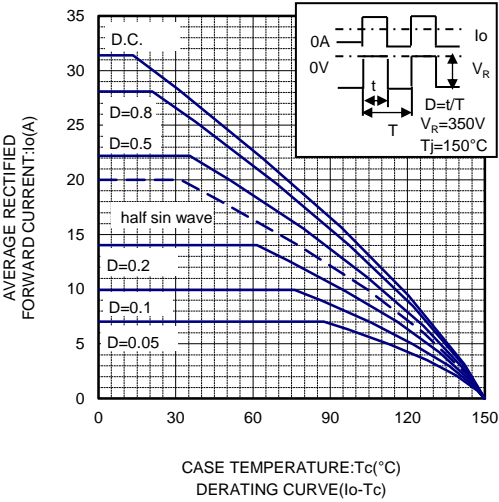
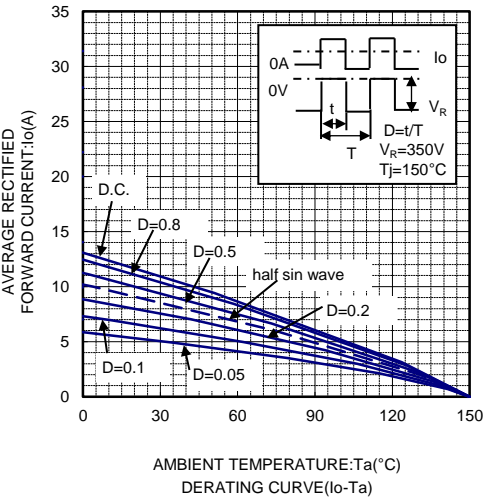
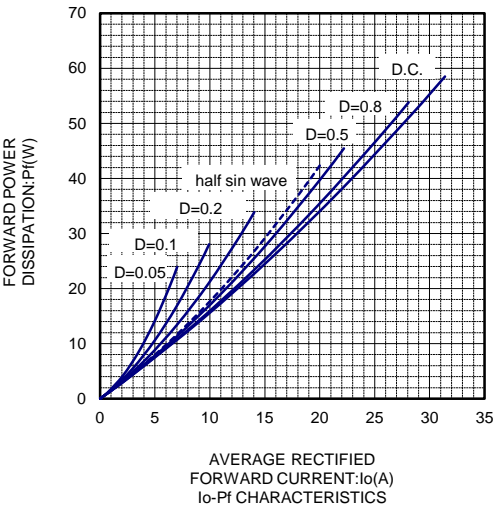
TIME: t(ms)  
I\_FSM-t CHARACTERISTICS



ESD DISPERION MAP



R\_th-t CHARACTERISTICS



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