

Super Fast Recovery Diode

RFUH20NS6S
●Series

Super Fast Recovery

●Applications

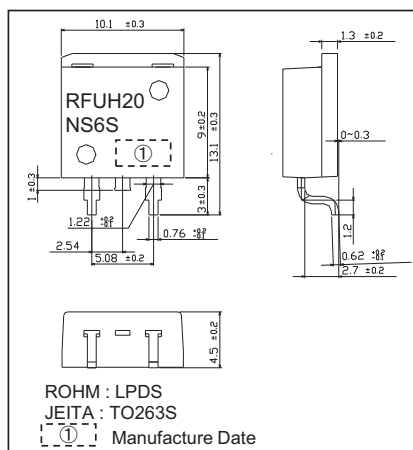
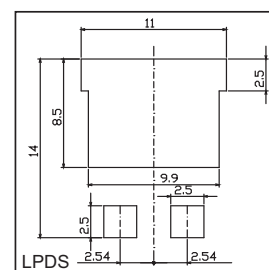
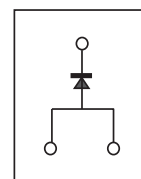
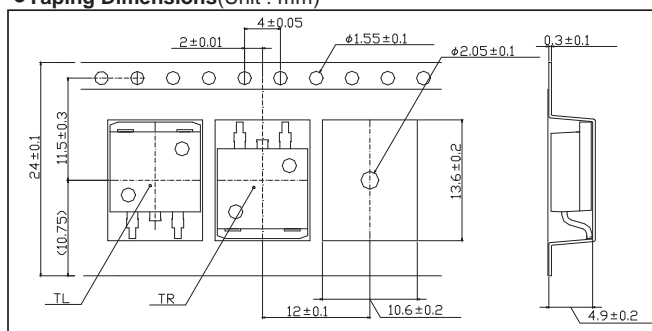
General rectification

●Features

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

●Construction

Silicon epitaxial planer type

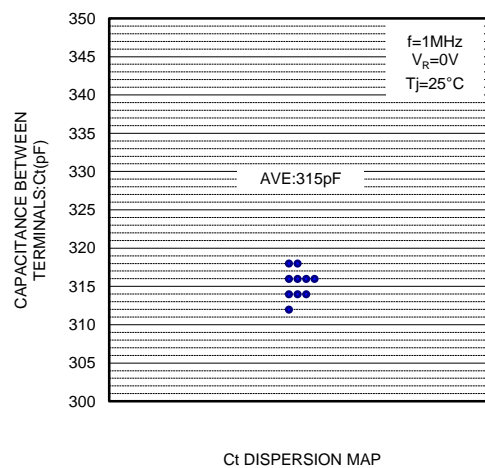
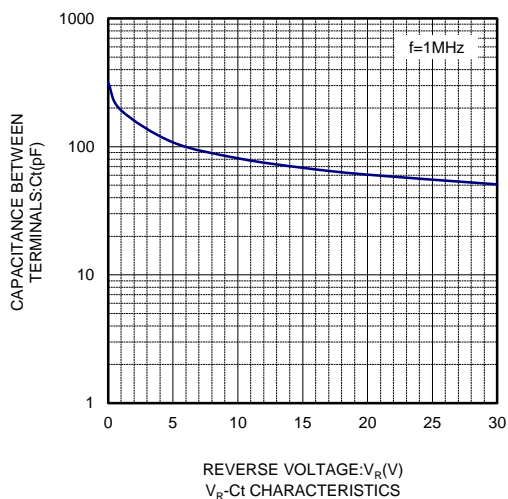
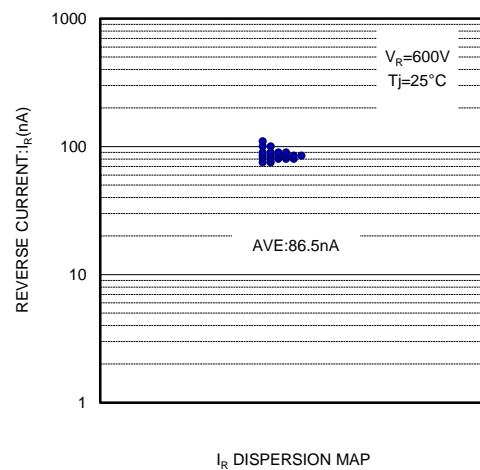
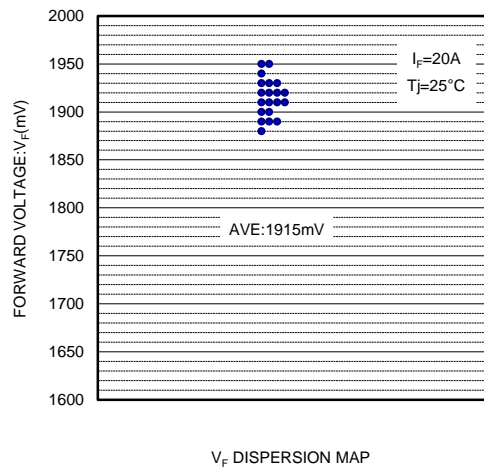
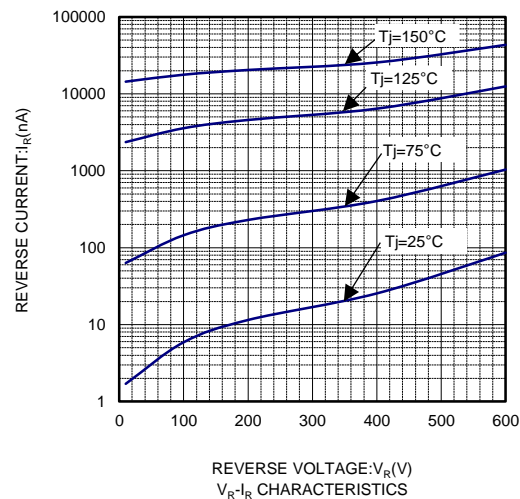
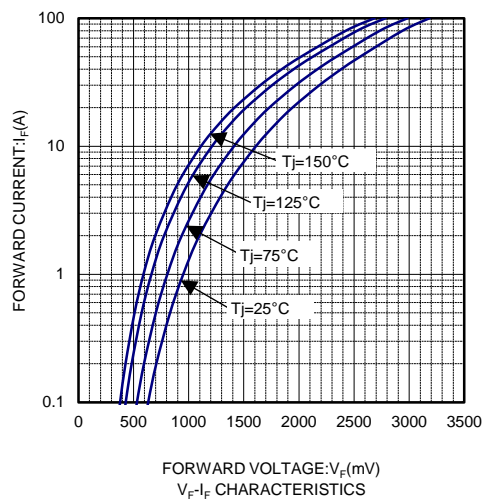
●Dimensions(Unit : mm)

●Land Size Figure(Unit : mm)

●Structure

●Taping Dimensions(Unit : mm)

●Absolute Maximum Ratings(Tc=25°C)

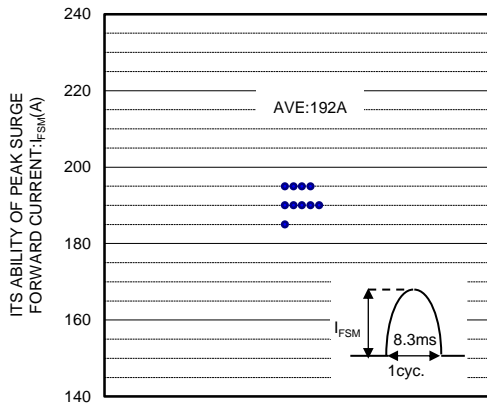
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V_{RM}	Duty ≤ 0.5	600	V
Reverse voltage	V_R	Direct voltage	600	V
Average rectified forward current	I_o	60Hz half sin wave , Resistive load Tc=27°C	20	A
Forward current surge peak	I_{FSM}	60Hz half sin wave , Non-repetitive at Tj=25°C ^(*)	100	A
Junction temperature	Tj		150	°C
Storage temperature	Tstg		-55 to +150	°C

(*) 1-3pin common circuit

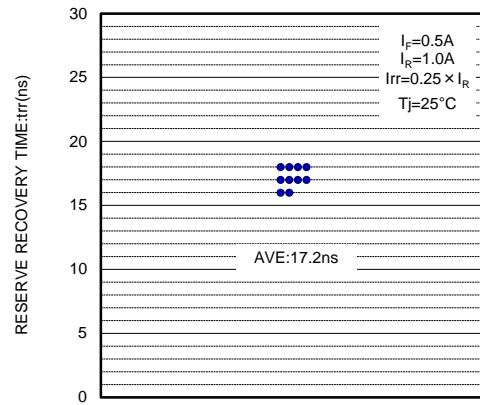
●Electrical Characteristics(Tj=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F=20A$	—	1.8	2.8	V
Reverse current	I_R	$V_R=600V$	—	0.1	10	μA
Reverse recovery time	trr	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \times I_R$	—	18	35	ns
Thermal resistance	Rth(j-c)	Junction to case	—	—	2.5	°C/W

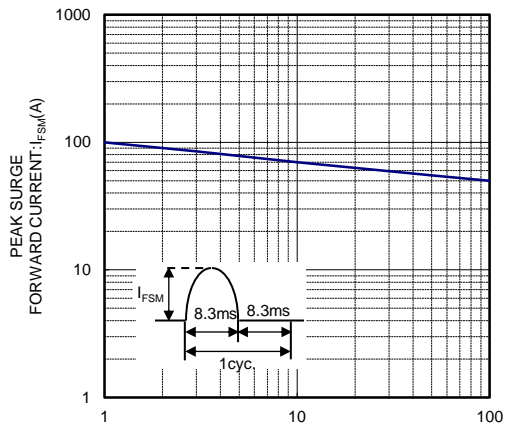




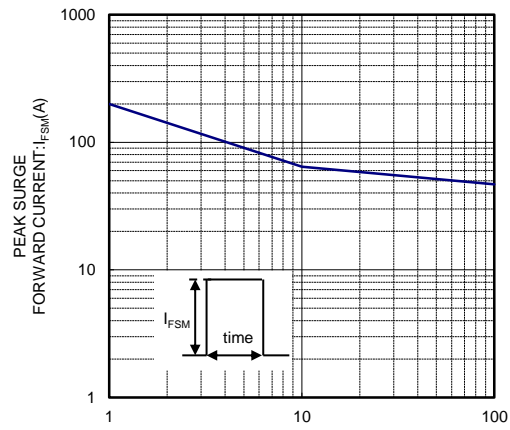
I_{FSM} DISPERSION MAP



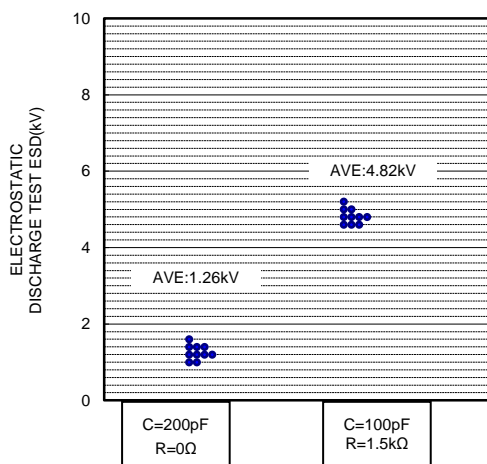
t_{rr} DISPERSION MAP



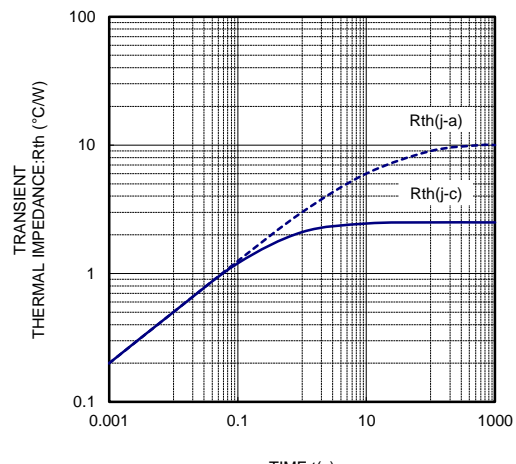
NUMBER OF CYCLES
 I_{FSM} CYCLE CHARACTERISTICS



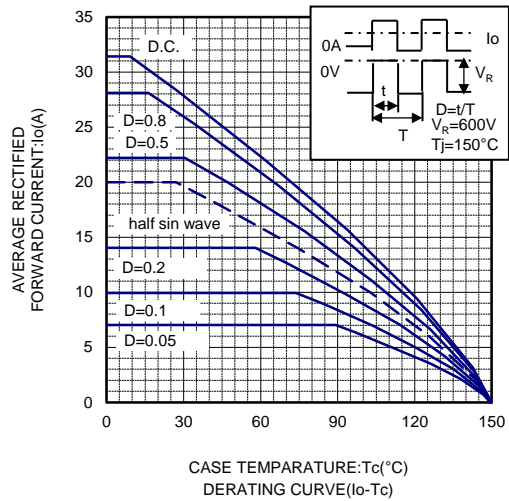
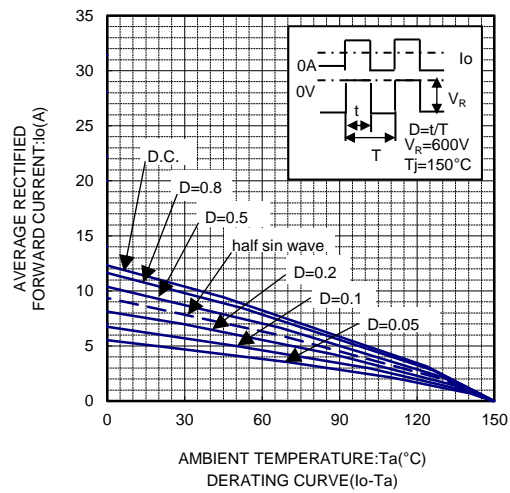
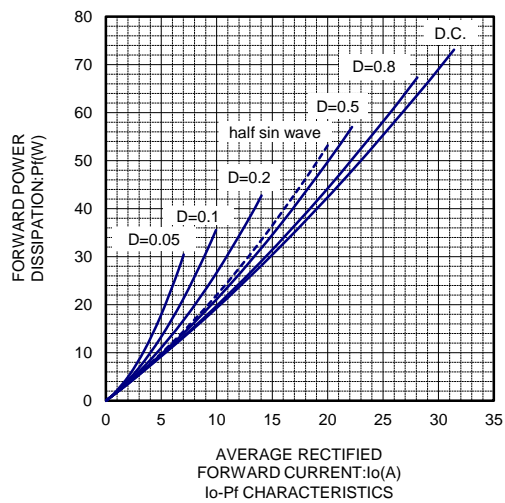
TIME: t (ms)
 I_{FSM} - t CHARACTERISTICS



ESD DISPERSION MAP



TIME: t (s)
 R_{th} - t CHARACTERISTICS



Notes

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