

Super Fast Recovery Diode

RFN5B2S

● **Applications**

General rectification

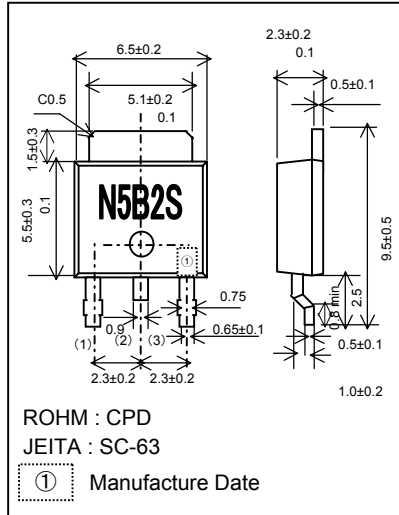
● **Features**

- 1) Power mold type. (CPD)
- 2) Low switching loss
- 3) High current overload capacity

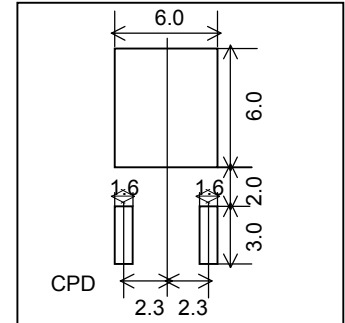
● **Construction**

Silicon epitaxial planar

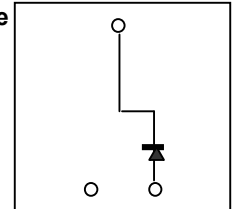
● **Dimensions (Unit : mm)**



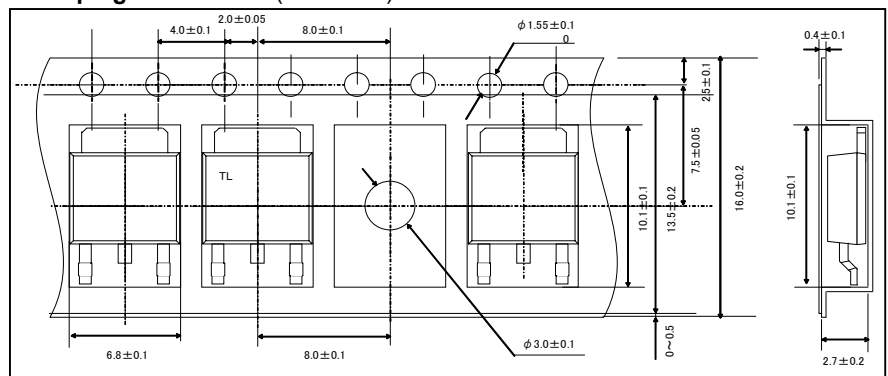
● **Land size figure (Unit : mm)**



● **Structure**



● **Taping dimensions (Unit : mm)**

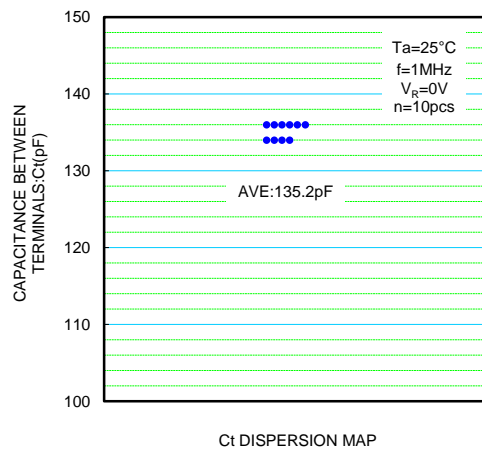
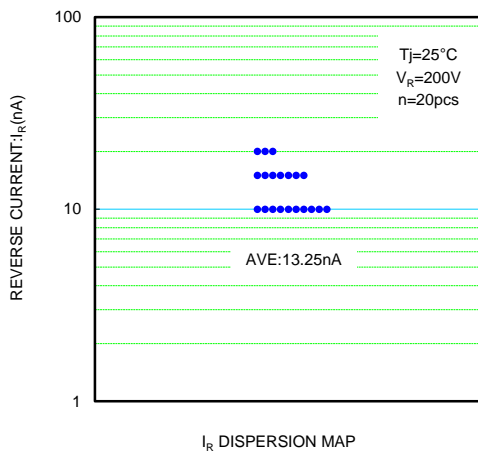
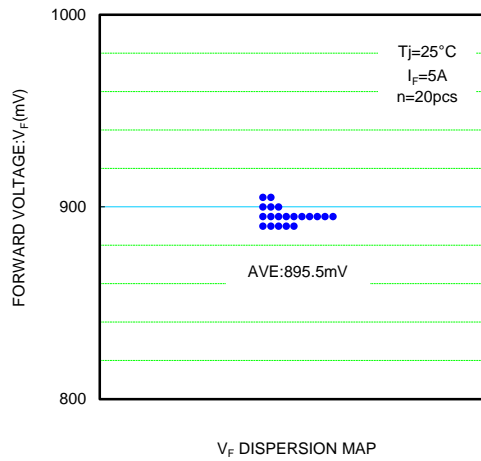
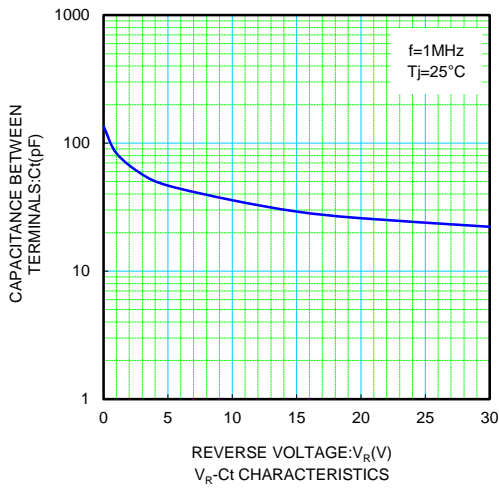
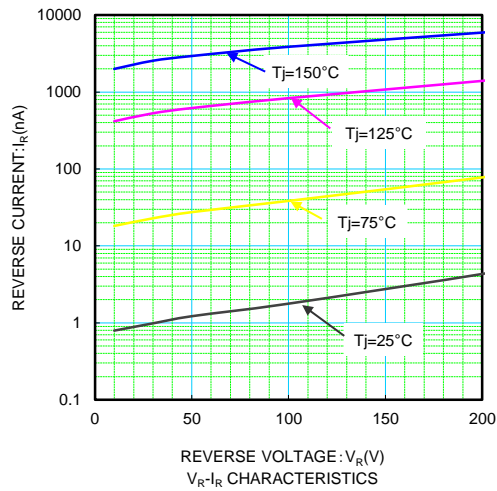
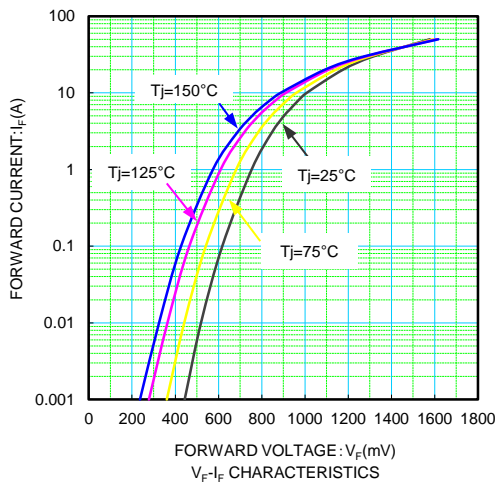


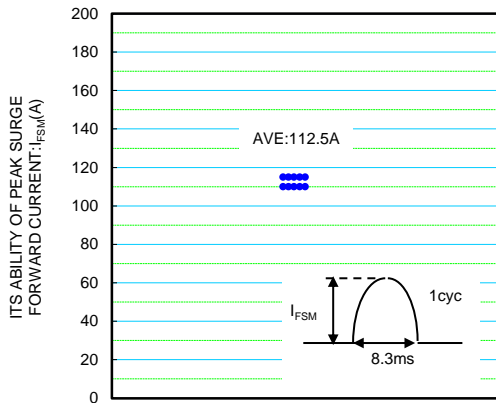
● **Absolute maximum ratings (Tc=25°C)**

Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak Reverse voltage	V_{RM}	Duty \leq 0.5	200	V
Reverse voltage	V_R	Direct voltage	200	V
Average rectified forward current	I_o	60Hz half sin wave, resistive load Tc=82°C	5	A
Forward current surge peak	I_{FSM}	60Hz half sin wave, Non-repetitive one cycle peak value, Tj=25°C	40	A
Junction temperature	Tj		150	°C
Storage temperature	Tstg		-55 to +150	°C

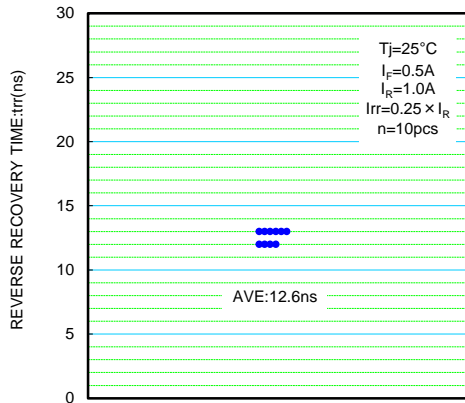
● **Electrical characteristics (Tj=25°C)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F=5A$	—	0.90	0.98	V
Reverse current	I_R	$V_R=200V$	—	0.01	10	μA
Reverse recovery time	trr	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \times I_R$	—	13	25	ns
Thermal Resistance	Rth(j-c)	junction to lead	—	—	12	°C/W

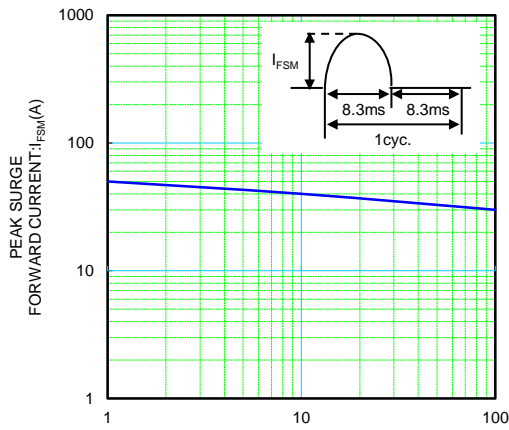




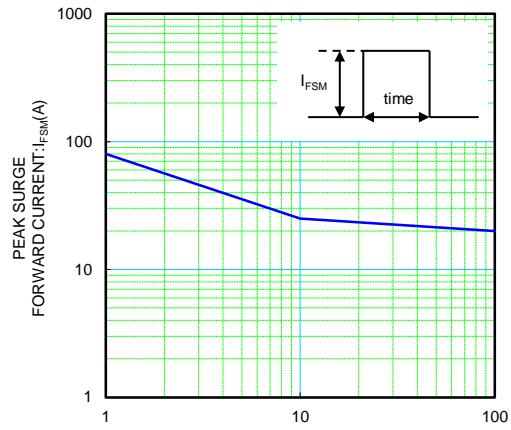
I_{FSM} DISPERSION MAP



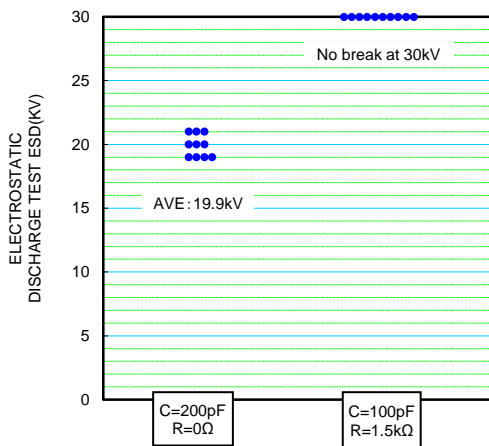
trr DISPERSION MAP



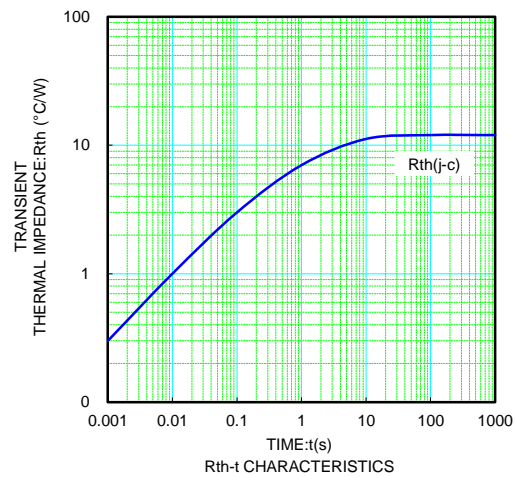
I_{FSM} CYCLE CHARACTERISTICS



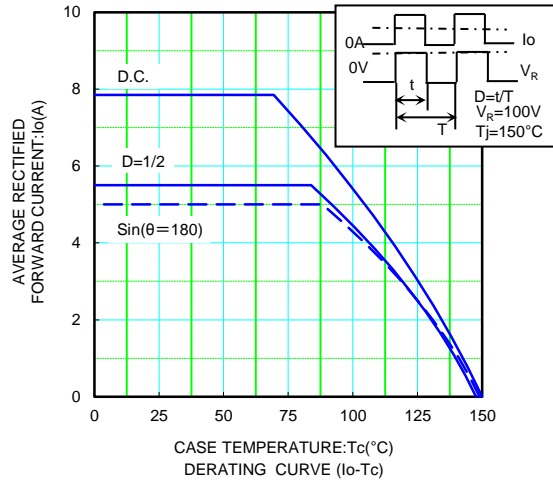
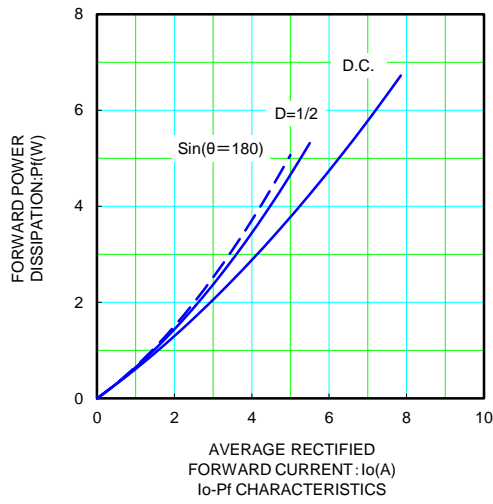
I_{FSM}-t CHARACTERISTICS



ESD DISPERSION MAP



R_{th}-t CHARACTERISTICS



Notes

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