

Super Fast Recovery Diode

RFN10T2D

●Applications

General rectification

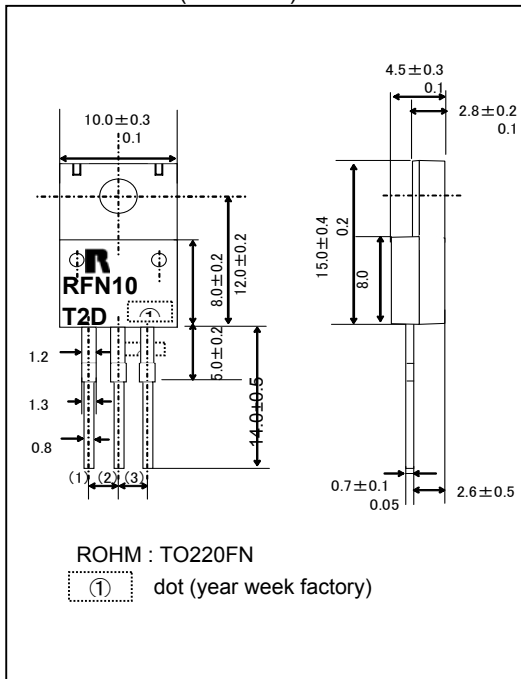
●Features

- 1) Cathode common Dual type. (TO-220)
- 2) Low V_F
- 3) Low switching loss

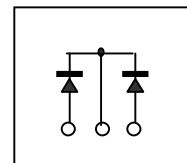
●Construction

Silicon epitaxial planer

●Dimensions (Unit : mm)



●Structure



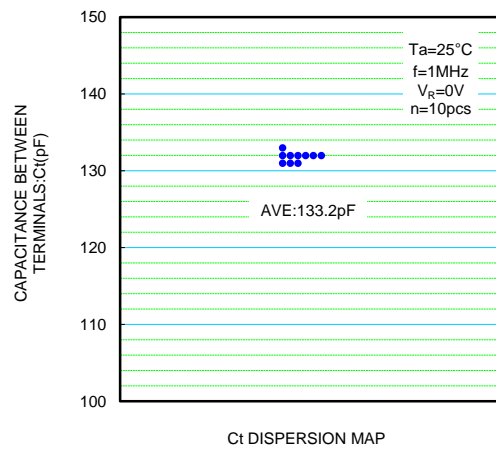
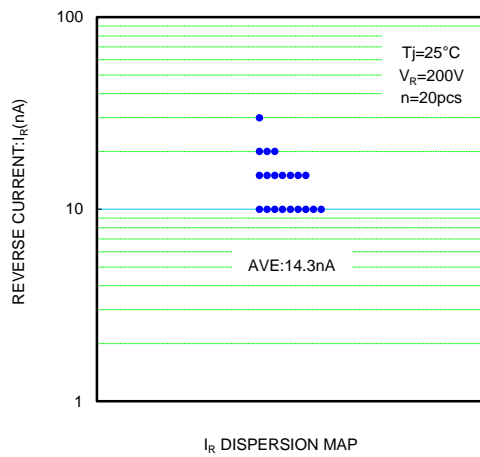
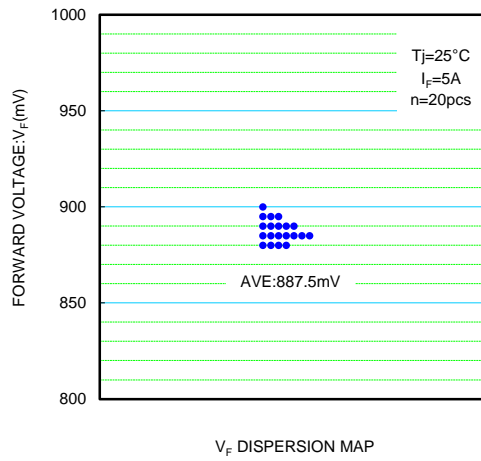
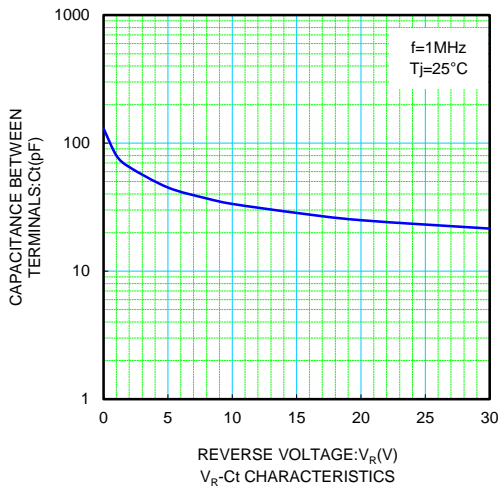
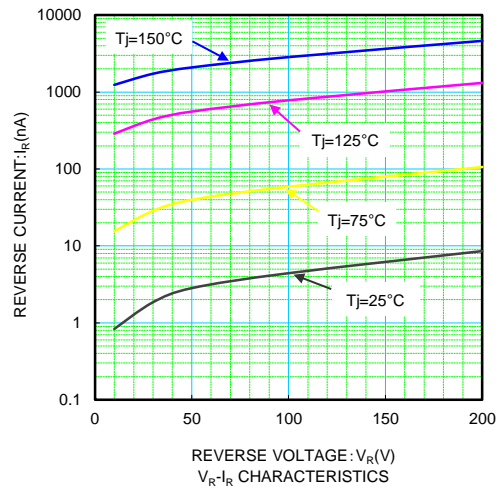
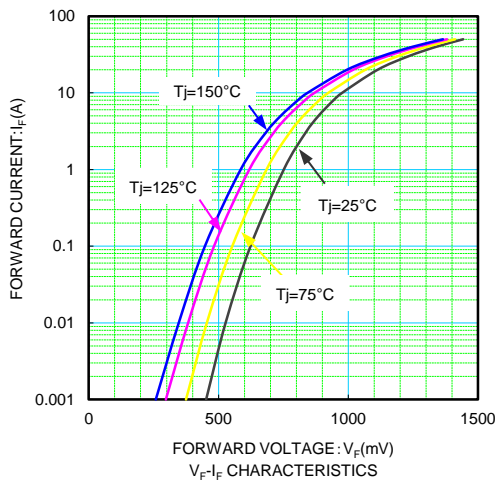
●Absolute maximum ratings (Tc=25°C)

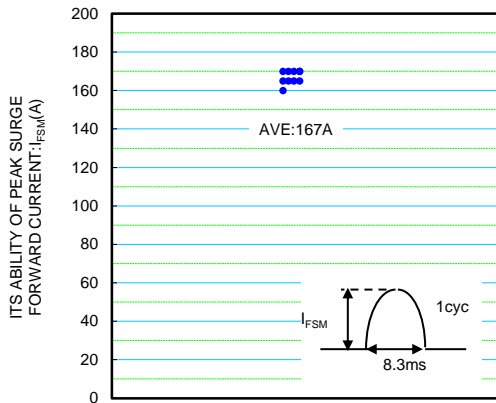
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V_{RM}	Duty \leq 0.5	200	V
Reverse voltage	V_R	Direct voltage	200	V
Average rectified forward current	I_o	60Hz half sin wave, Resistance load, 1/2 I_o at per diode	Tc=122°C 10	A
Forward current surge peak	I_{FSM}	60Hz half sin wave, Non-repetitive one cycle peak value, Tj=25°C	80	A
Junction temperature	Tj		150	°C
Storage temperature	Tstg		-55 to +150	°C

●Electrical characteristics (Tj=25°C)

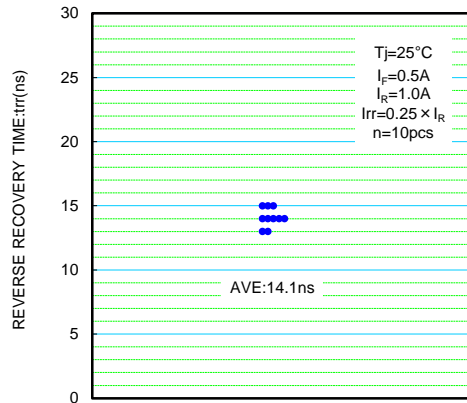
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F=5A$	—	0.90	0.98	V
Reverse current	I_R	$V_R=200V$	—	0.01	10	μA
Reverse recovery time	trr	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \times I_R$	—	15	25	ns
Thermal Resistance	Rth(j-c)	junction to case	—	—	2.5	°C/W

* per diode

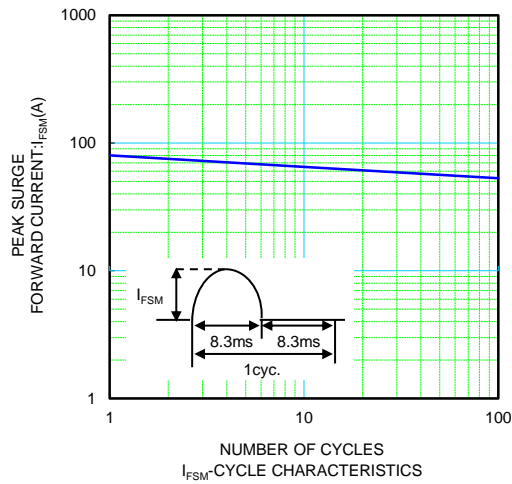




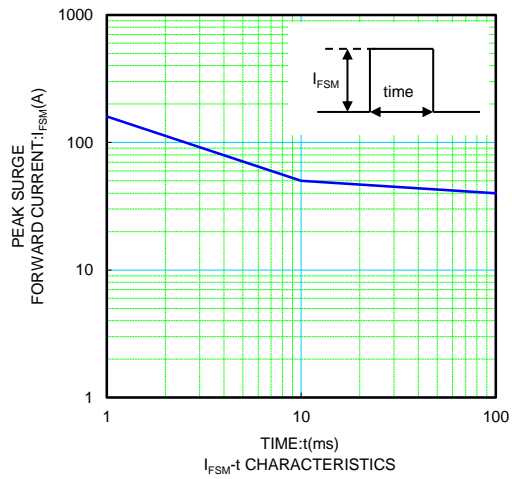
I_{FSM} DISPERSION MAP



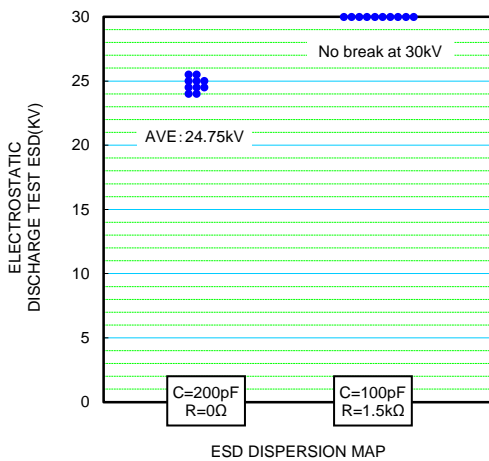
trr DISPERSION MAP



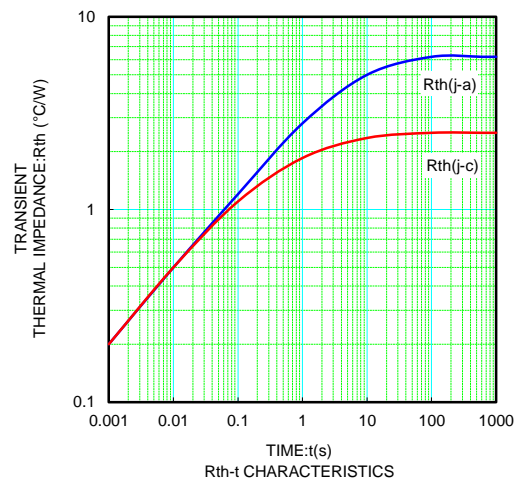
I_{FSM} CYCLE CHARACTERISTICS



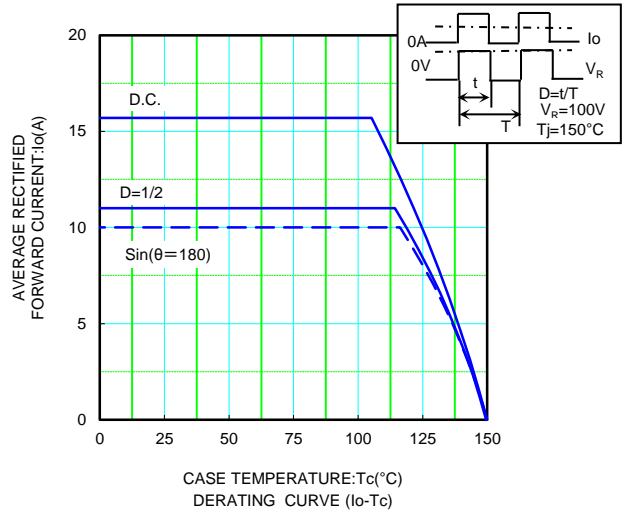
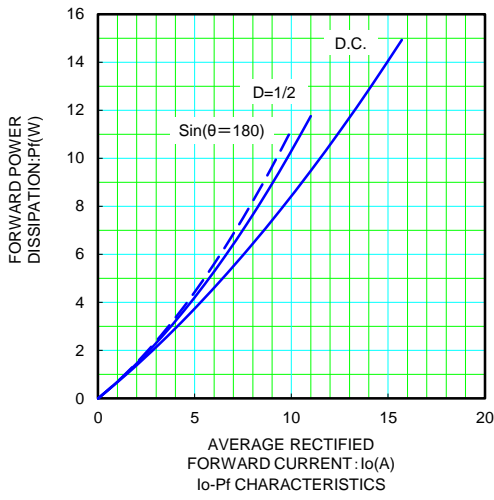
I_{FSM} -t CHARACTERISTICS



ESD DISPERSION MAP



R_{th} -t CHARACTERISTICS



Notes

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