

Super Fast Recovery Diode

RFU20TM5S

●Series

Ultra Fast Recovery

●Applications

General rectification

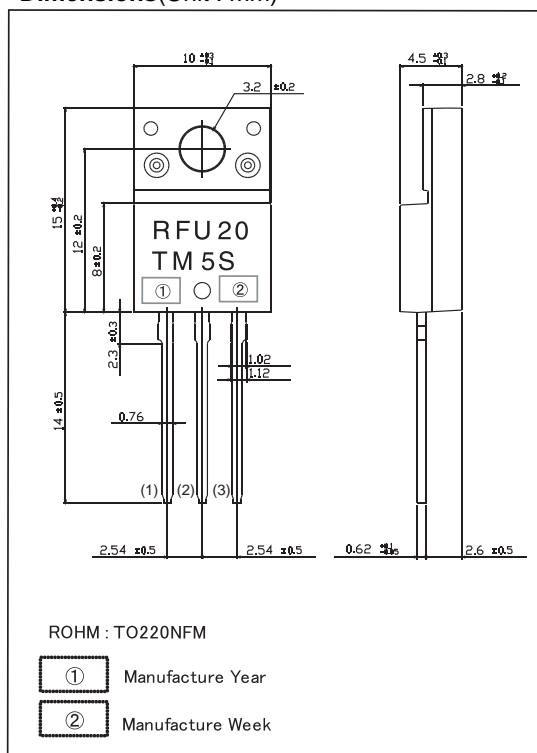
●Features

- 1) Cathode common Single type. (TO-220)
- 2) Ultra high switching speed

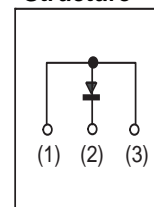
●Construction

Silicon epitaxial planer

● **Dimensions**(Unit : mm)



● Structure



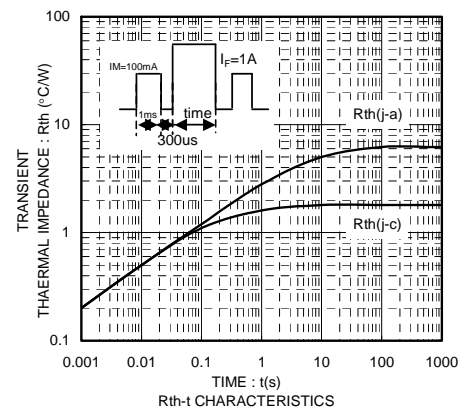
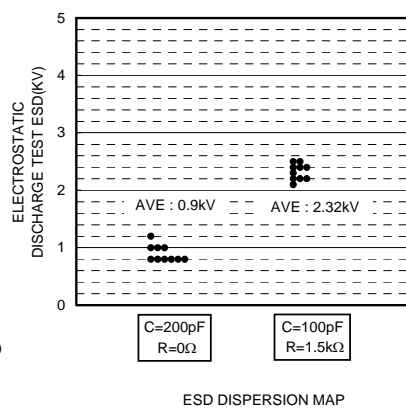
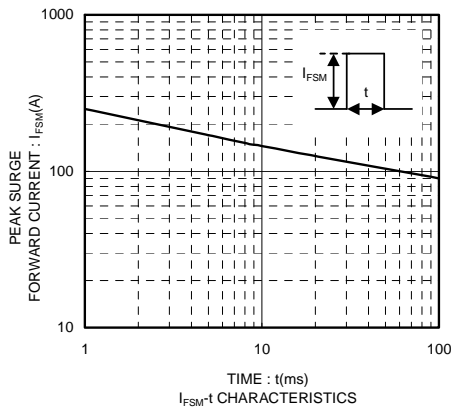
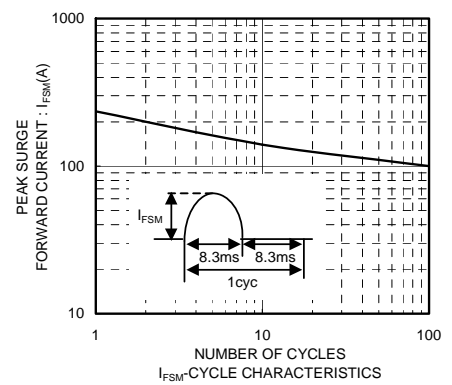
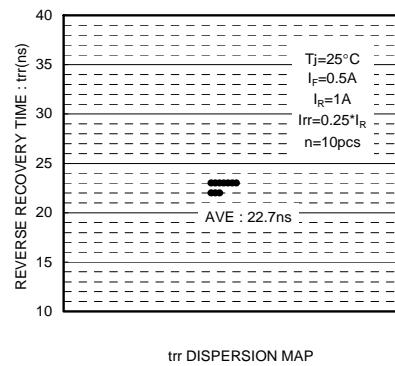
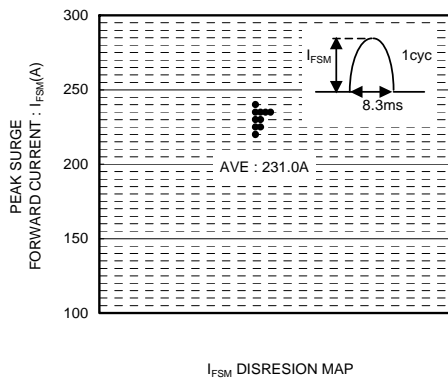
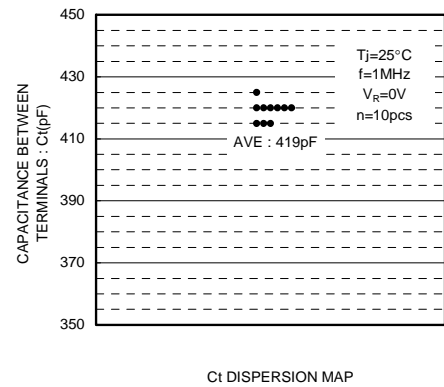
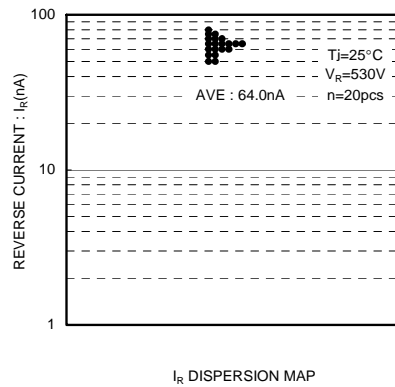
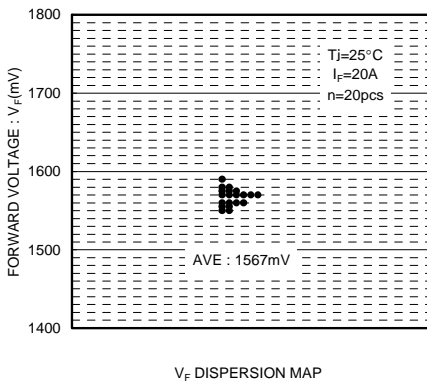
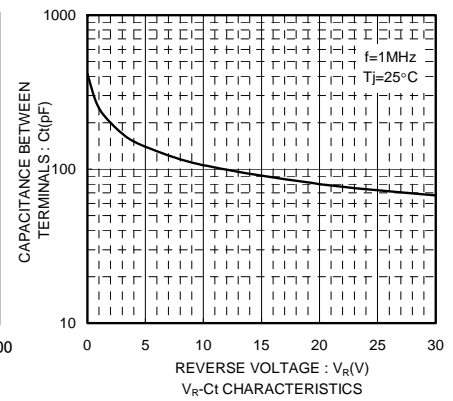
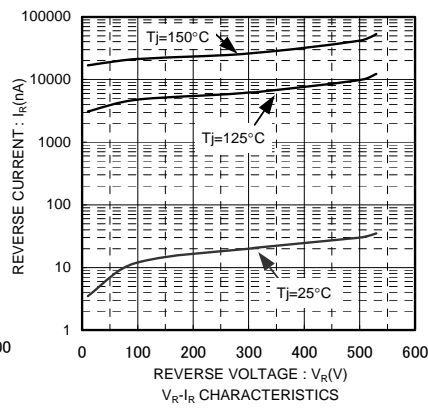
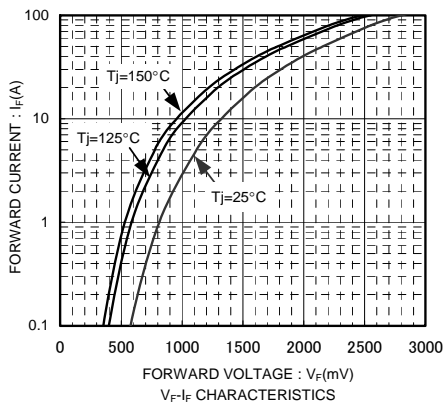
●Absolute maximum ratings (Tc=25°C)

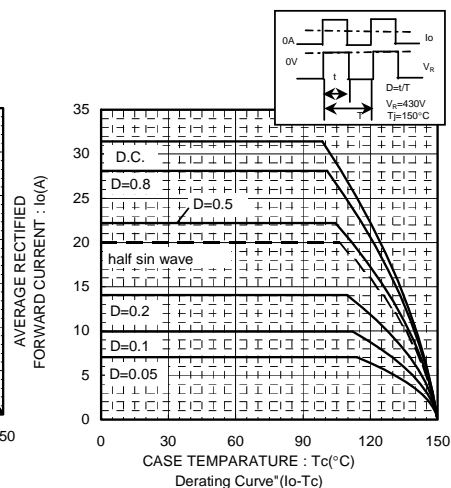
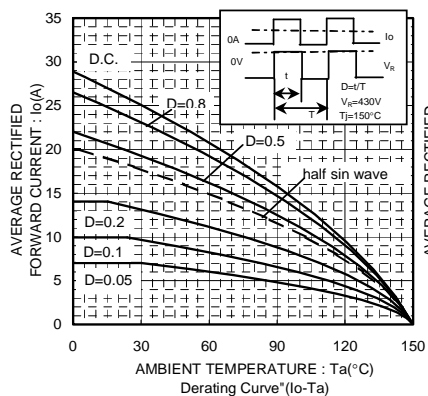
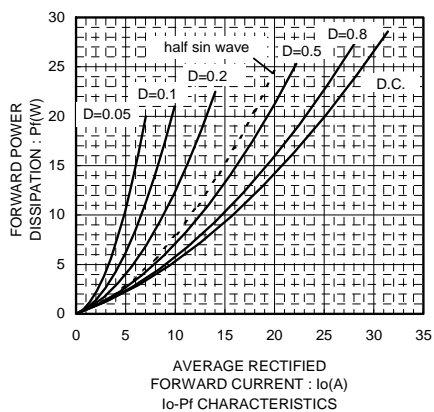
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V_{RM}	Duty \leq 0.5	530	V
Reverse voltage	V_R	Direct voltage	530	V
Average rectified forward current	I_o	60Hz half sin wave, Resistance load, $T_c=95^{\circ}C$	20	A
Forward current surge peak	I_{FSM}	60Hz half sin wave, Non-repetitive one cycle peak value, $T_j=25^{\circ}C$	100	A
Junction temperature	T_j		150	$^{\circ}C$
Storage temperature	T_{stg}		-55 to +150	$^{\circ}C$

●Electrical characteristics (Tj=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F=20A$	-	1.65	2	V
Reverse current	I_R	$V_R=530V$	-	0.05	10	μA
Reverse recovery time	t_{rr}	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \times I_R$	-	23	30	ns
Thermal Resistance	$R_{th(j-c)}$	junction to case	-	-	1.8	$^{\circ}C/W$

●Electrical characteristic curves





Notes

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