

Super Fast Recovery Diode

RFUS20TM6S

●Series

Ultra Fast Recovery

●Applications

General rectification

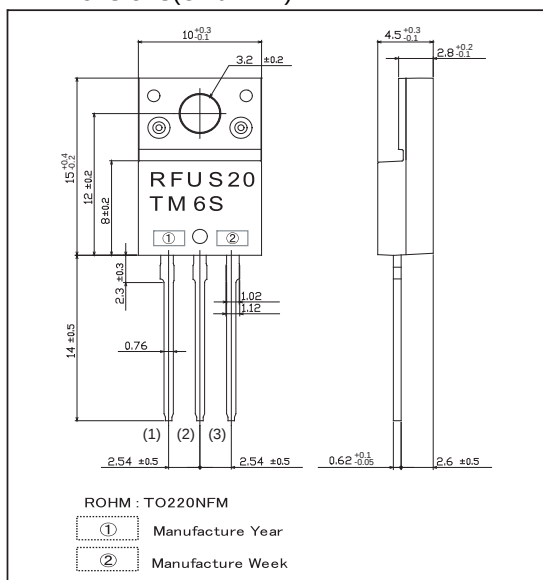
●Features

- 1) Cathode Common Single type.(TO-220)
- 2) Ultra High switching speed

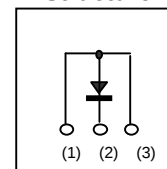
●Construction

Silicon epitaxial planar

●Dimensions(Unit : mm)



●Structure



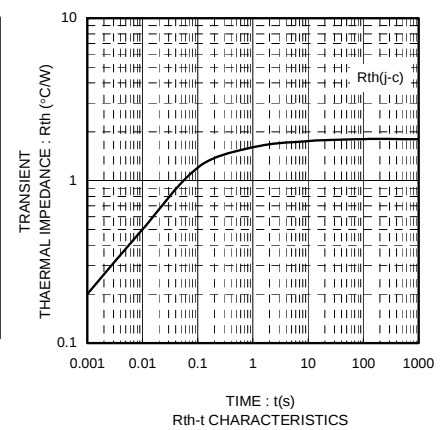
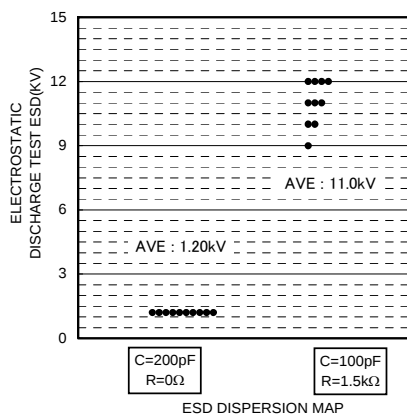
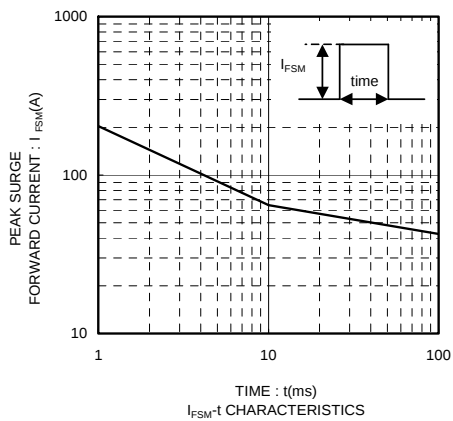
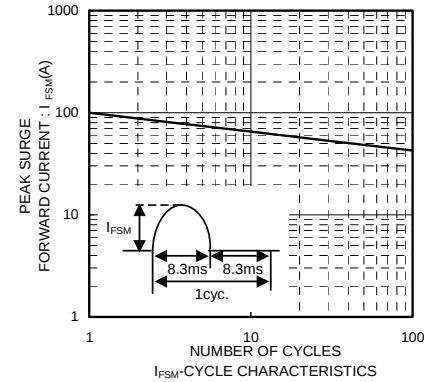
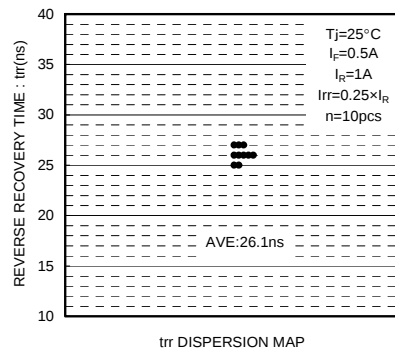
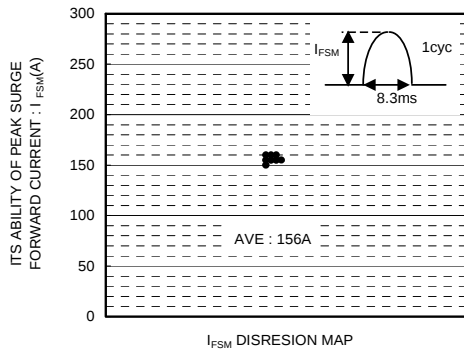
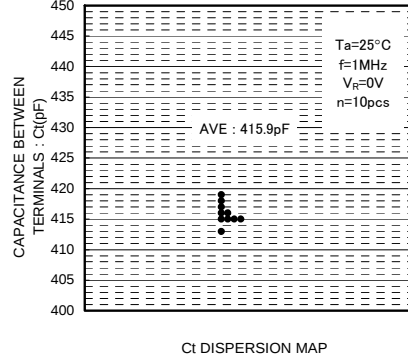
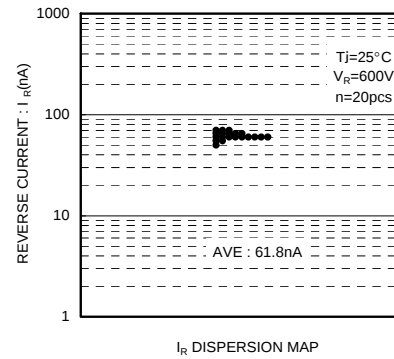
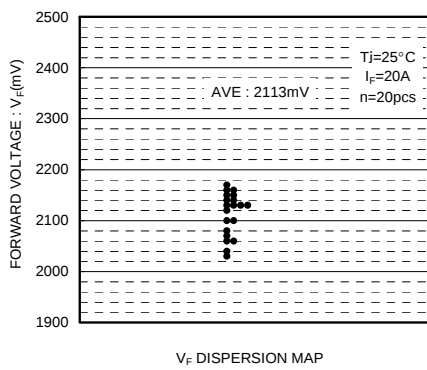
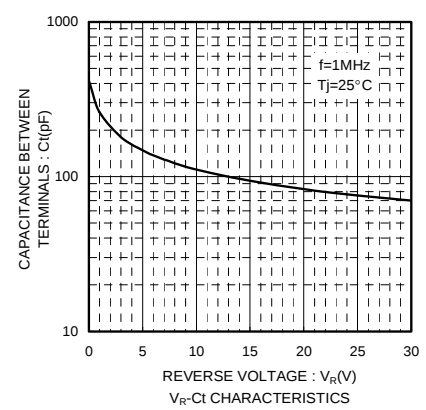
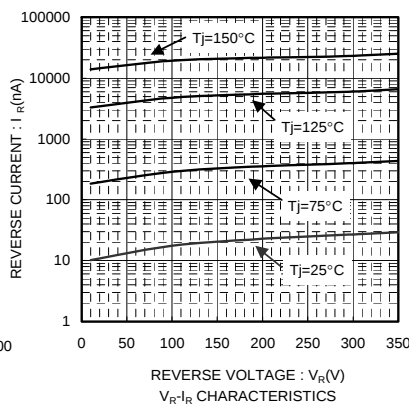
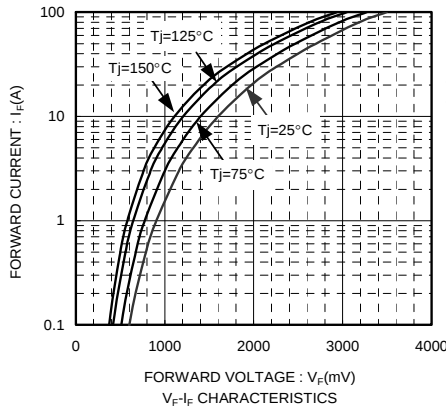
●Absolute maximum ratings(Tc=25°C)

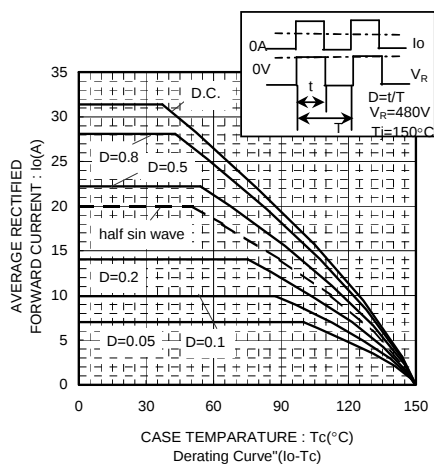
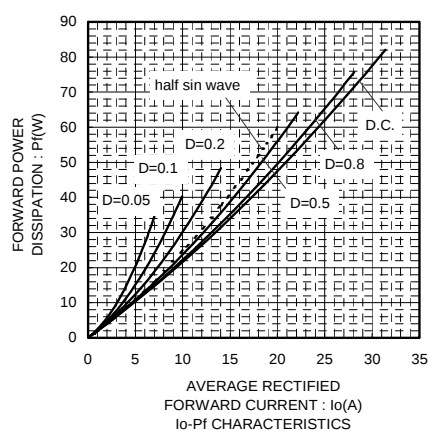
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V_{RM}	Duty ≤ 0.5	600	V
Reverse voltage	V_R	Direct voltage	600	V
Average rectified forward current	I_o	60Hz half sin wave, Resistance load, Tc=50°C	20	A
Forward current surge peak	I_{FSM}	60Hz half sin wave, Non-repetitive one cycle peak value, Tj=25°C	100	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	$I_F=20A$	—	2.3	2.8	V
Reverse current	I_R	$V_R=600V$	—	0.05	10	μA
Reverse recovery time	trr	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \times I_R$	—	23	35	ns
Thermal Resistance	Rth(j-c)	junction to case	—	—	1.8	°C / W

●Electrical characteristics curves





Notes

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