

# Super Fast Recovery Diode

## RFUS10TF4S

●Series

Standard Fast Recovery

●Applications

General rectification

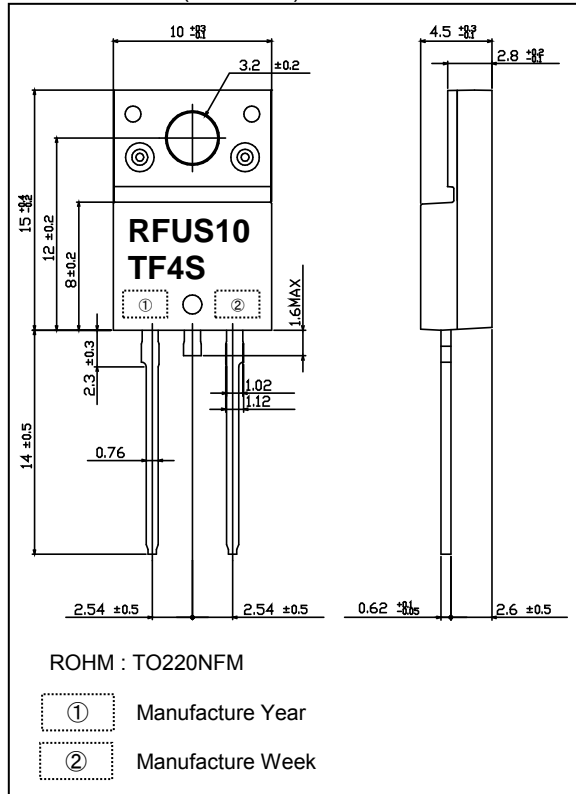
●Features

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

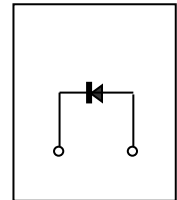
●Construction

Silicon epitaxial planer

●Dimensions (Unit : mm)



●Structure

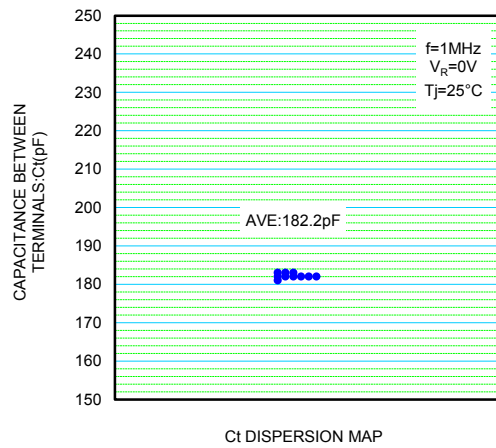
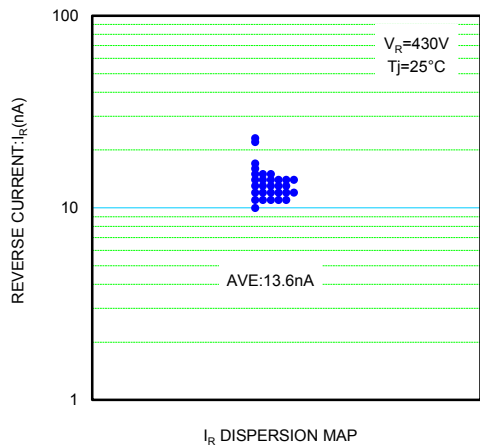
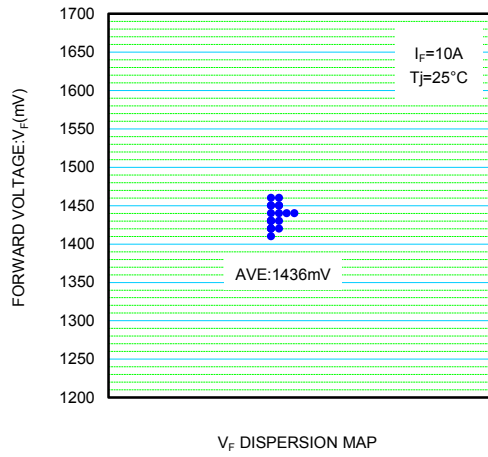
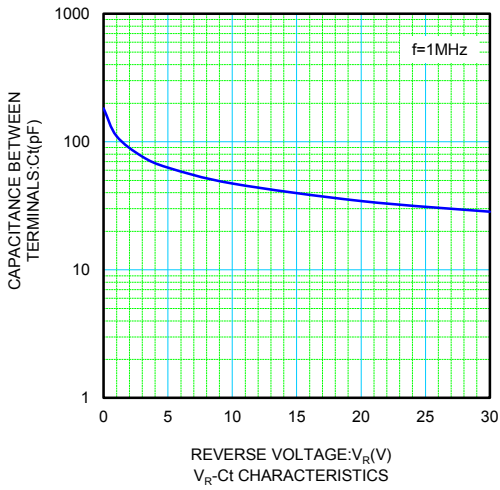
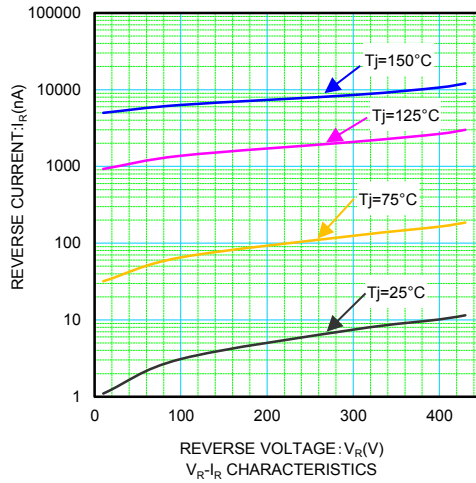
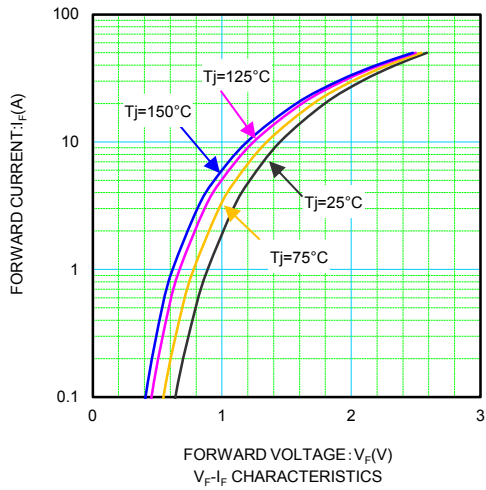


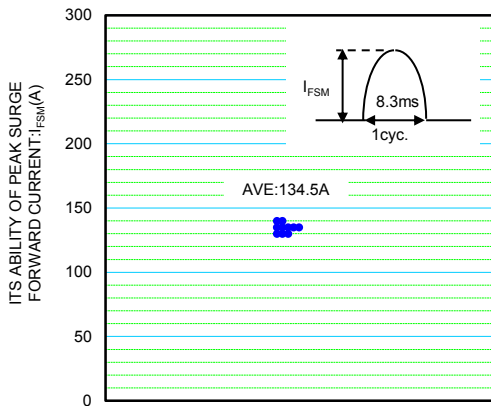
●Absolute maximum ratings (Tc=25°C)

Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	$V_{RM}$	Duty $\leq$ 0.5	430	V
Reverse voltage	$V_R$		430	V
Average rectified forward current	$I_O$	60Hz half sin wave, Resistance load, Tc=82°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

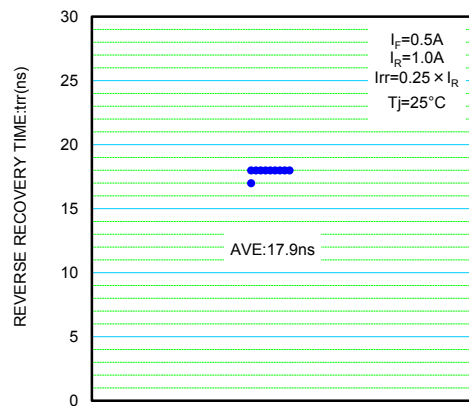
●Electrical characteristics (Tj=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	$V_F$	$I_F=10A$	—	1.45	1.7	V
Reverse current	$I_R$	$V_R=430V$	—	0.05	10	$\mu A$
Reverse recovery time	trr	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \times I_R$	—	19	30	ns
Thermal resistance	Rth(j-c)	junction to case	—	—	3	°C/W

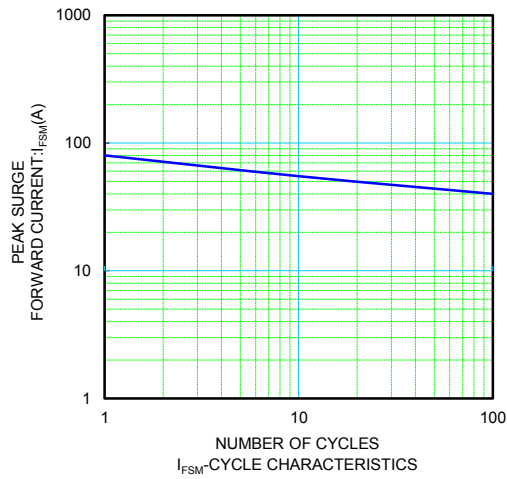




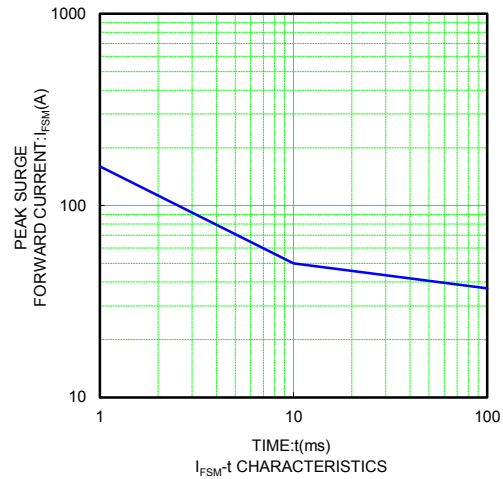
I<sub>FSM</sub> DISPERSION MAP



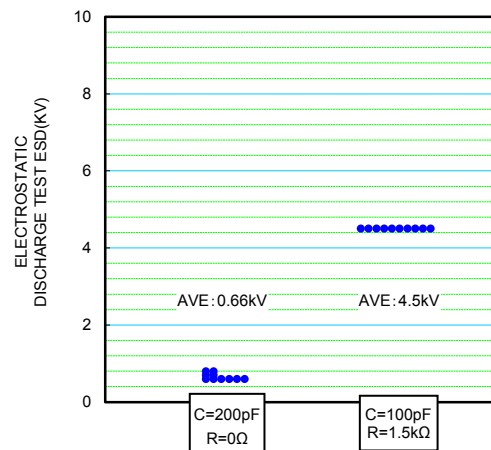
trr DISPERSION MAP



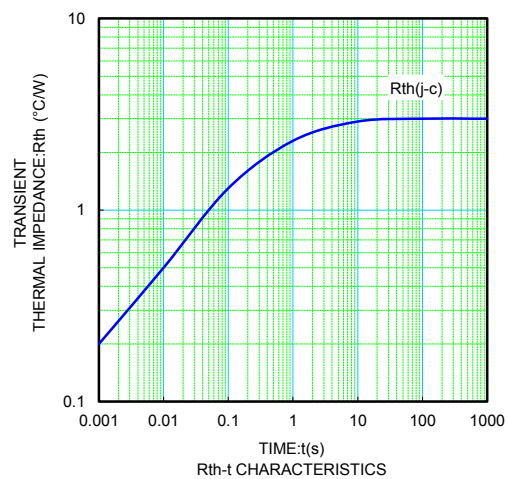
I<sub>FSM</sub> CYCLE CHARACTERISTICS



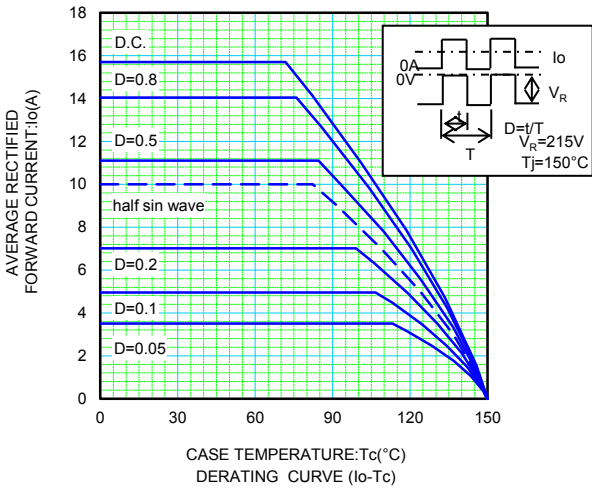
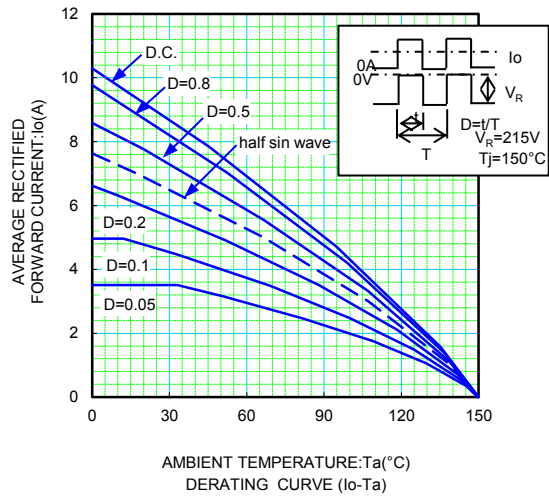
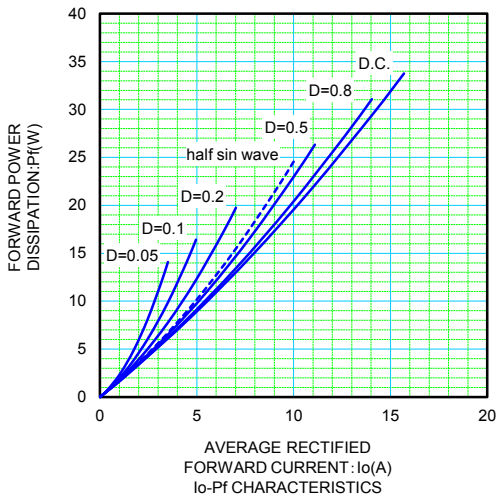
I<sub>FSM</sub>-t CHARACTERISTICS



ESD DISPERSION MAP



Rth-t CHARACTERISTICS



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