

# Super Fast Recovery Diode

## RFUS20TF6S

**●Series**

Ultra Fast Recovery

**●Applications**

General rectification

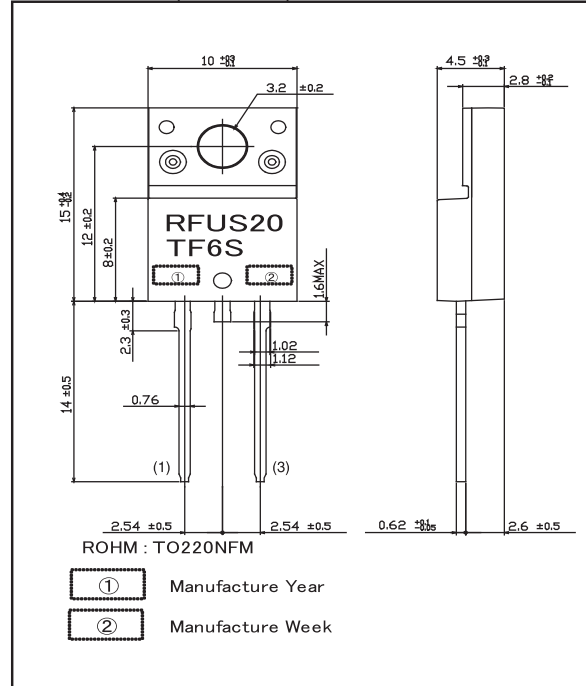
**●Features**

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

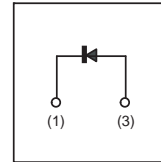
**●Construction**

Silicon epitaxial planar

**●Dimensions (Unit : mm)**



**●Structure**



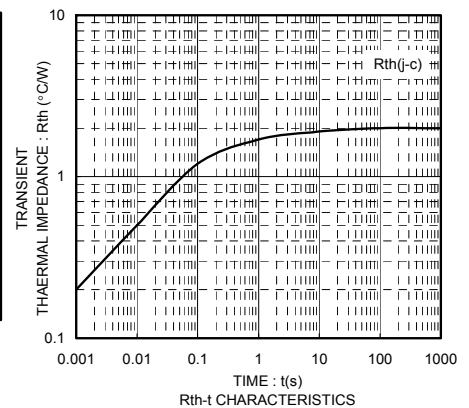
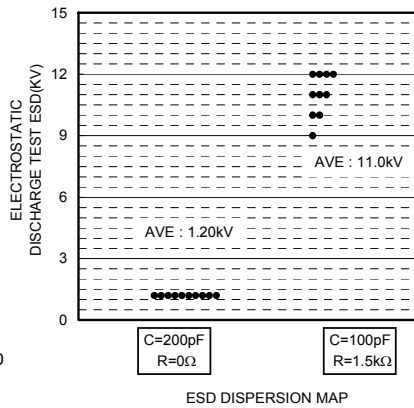
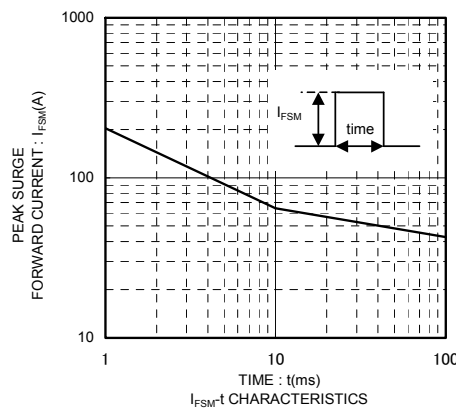
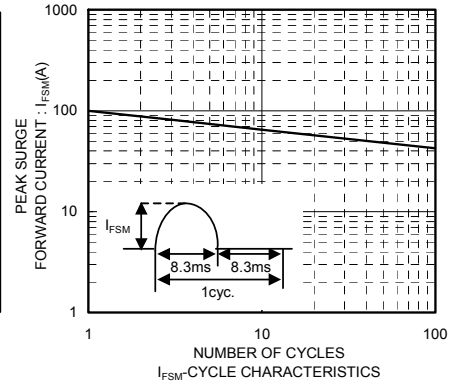
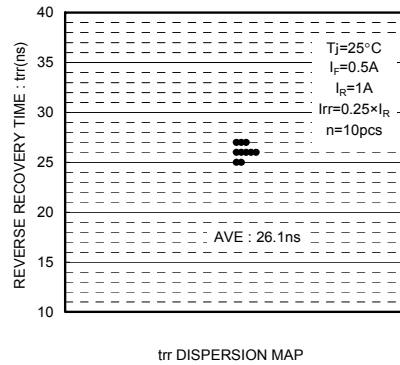
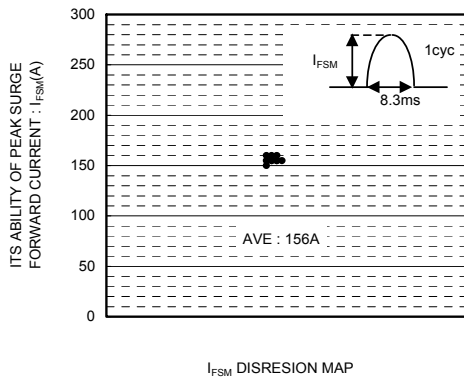
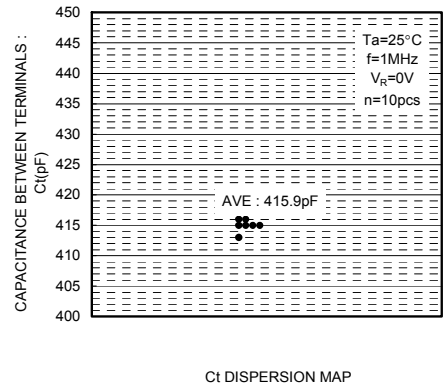
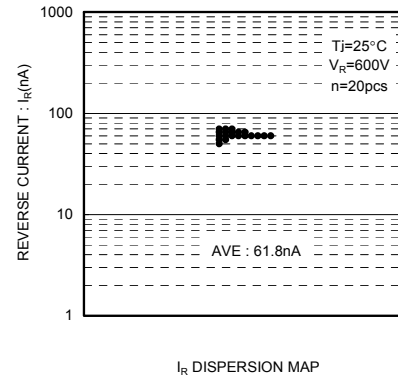
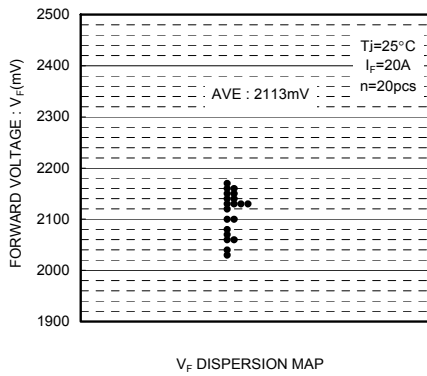
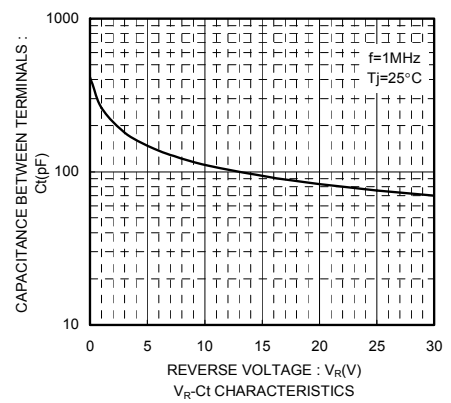
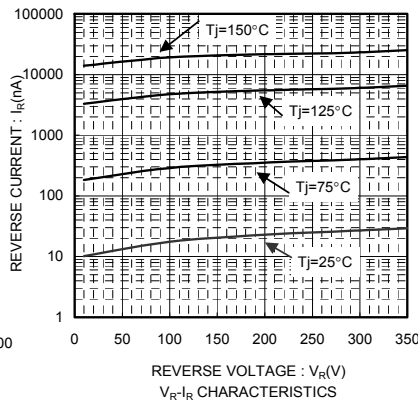
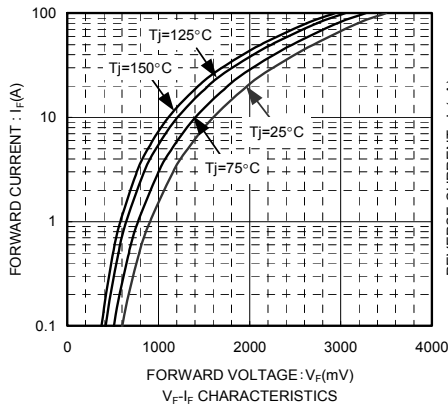
**●Absolute maximum ratings (Tc=25°C)**

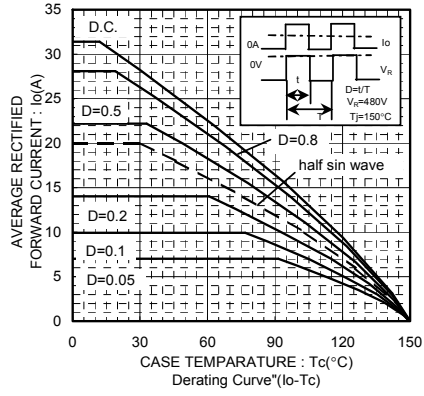
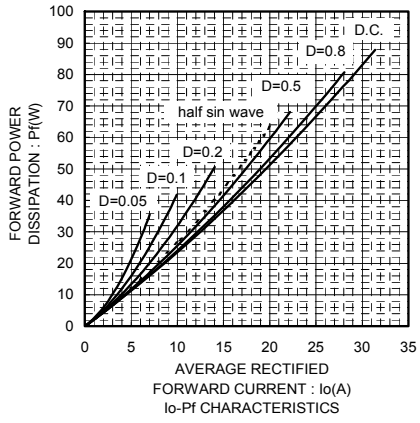
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	$V_{RM}$	Duty $\leq$ 0.5	600	V
Reverse voltage	$V_R$	Direct voltage	600	V
Average rectified forward current	$I_O$	60Hz half sin wave, Resistance load, Tc=30°C	20	A
Forward current surge peak	$I_{FSM}$	60Hz half sin wave, Non-repetitive 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	$V_F$	$I_F=20A$	-	2.2	2.8	V
Reverse current	$I_R$	$V_R=600V$	-	0.1	10	$\mu A$
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	-	-	2	°C/W

●Electrical characteristic curves





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