

Super Fast Recovery Diode

RF1005TF6S

●Series

Standard Fast Recovery

●Applications

General rectification

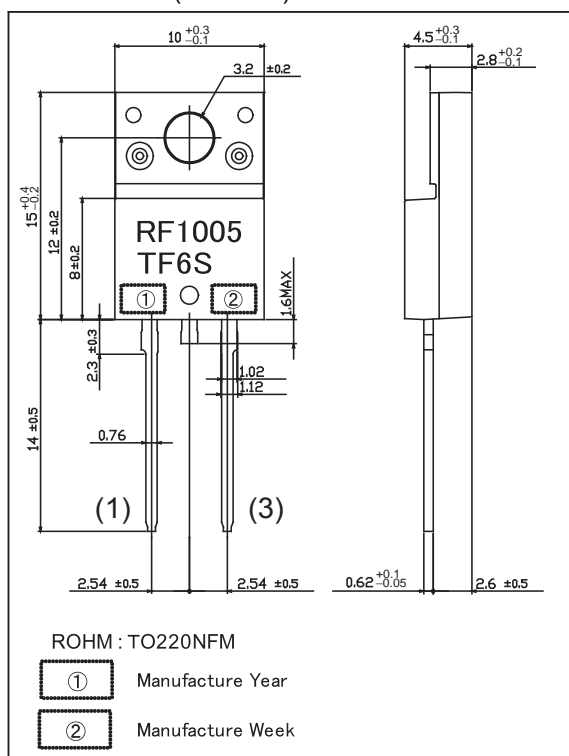
●Features

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

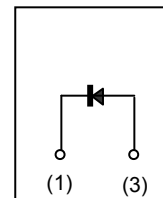
●Construction

Silicon epitaxial planer

●Dimensions (Unit : mm)



●Structure



●Absolute maximum ratings (Tc=25°C)

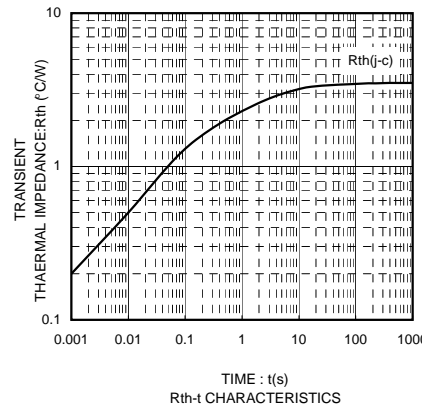
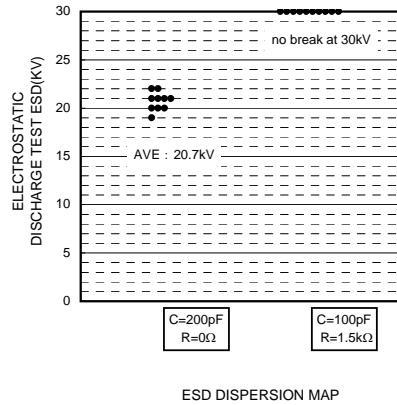
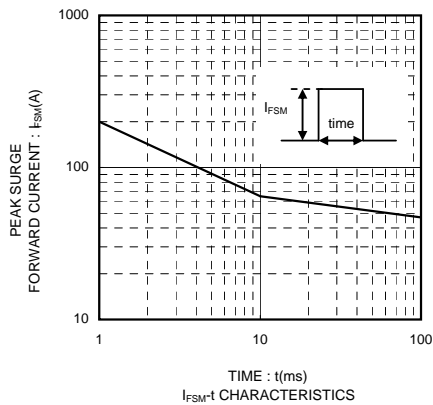
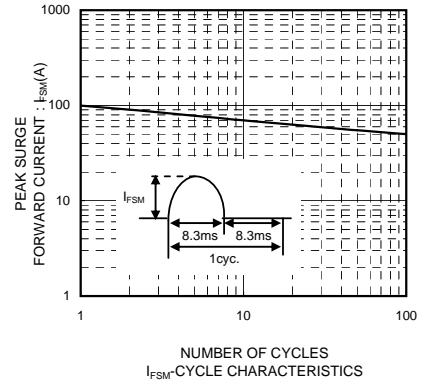
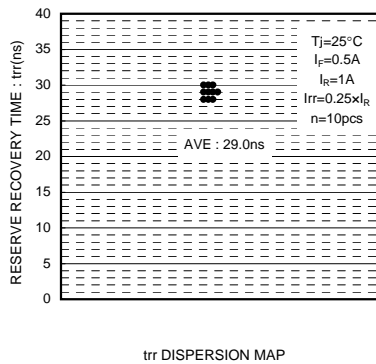
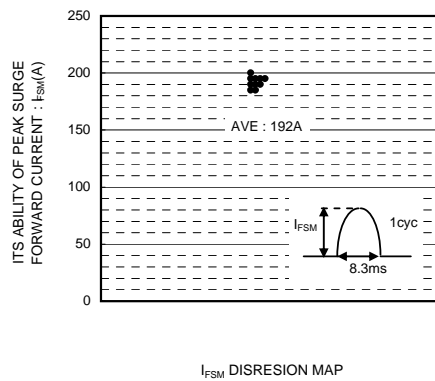
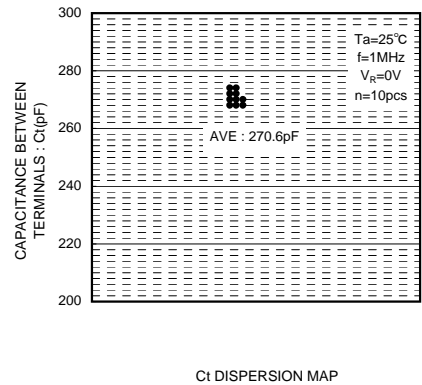
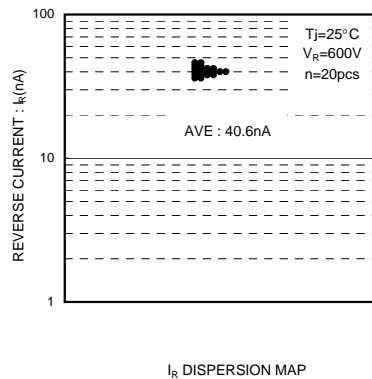
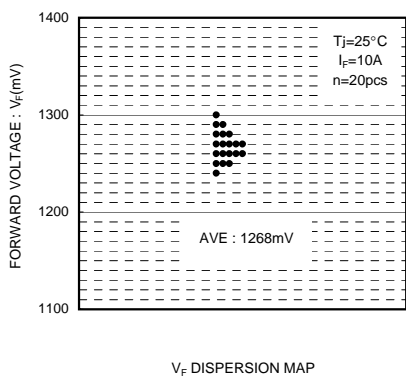
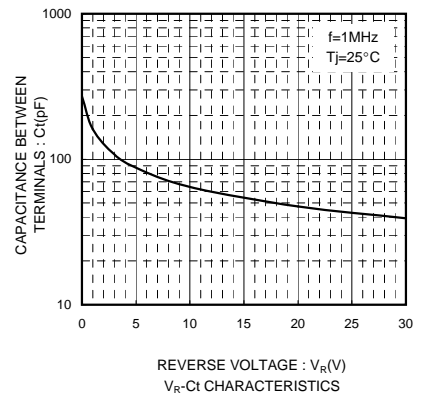
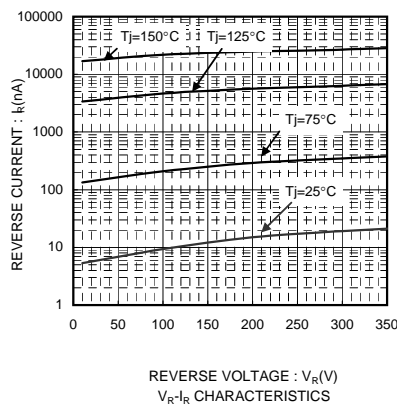
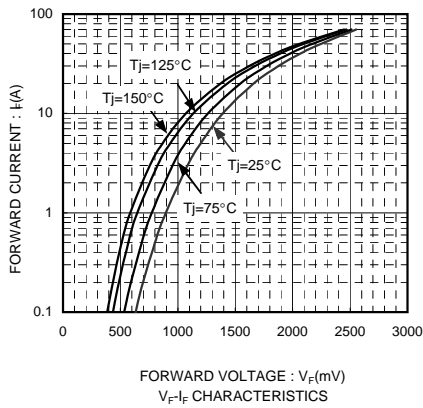
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V_{RM}	Duty ≤ 0.5	600	V
Reverse voltage	V_R	Direct voltage	600	V
Average rectified forward current	I_o	60Hz half sin wave, Resistance load, Tc=78°C	10	A
Forward current surge peak	I_{FSM}	60Hz half sin wave, Non-repetitive one cycle peak value, Tj=25°C	100	A
Junction temperature	Tj		150	°C
Storage temperature	Tstg		-55 to +150	°C

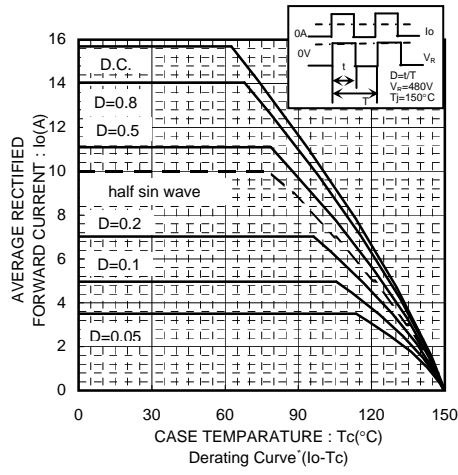
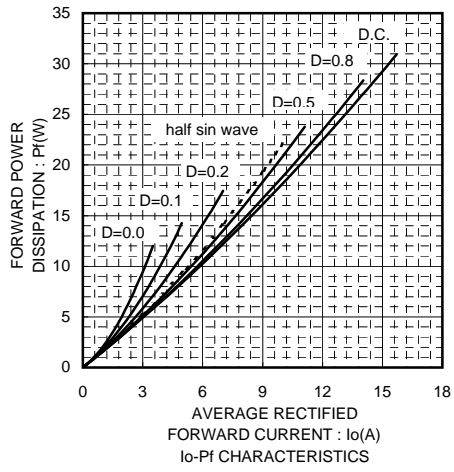
●Electrical characteristics (Tj=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F=10A$	-	1.4	1.7	V
Reverse current	I_R	$V_R=600V$	-	0.05	10	μA
Reverse recovery time(*)	trr	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \times I_R$	-	30	40	ns
Thermal resistance(*)	Rth(j-c)	junction to case	-	-	3.5	°C/W

(*) : Design assurance without measurement.

●Electrical characteristics curves





Notes

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