

Super Fast Recovery Diode

RF1005TF6S

●Series

Standard Fast Recovery

●Applications

General rectification

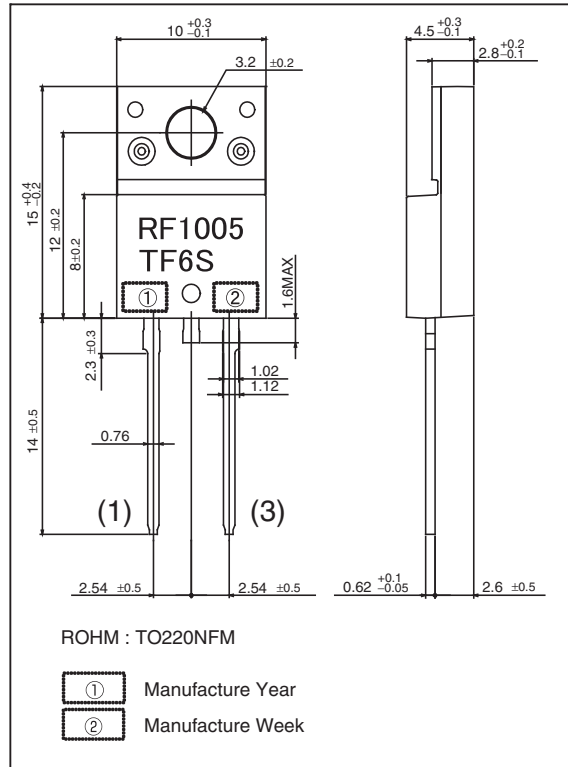
●Features

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

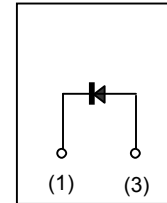
●Construction

Silicon epitaxial planer

●Dimensions (Unit : mm)



●Structure



●Absolute maximum ratings (T_c=25°C)

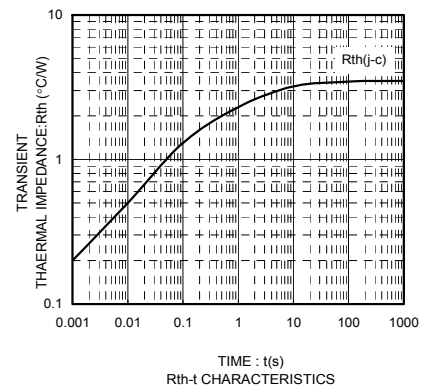
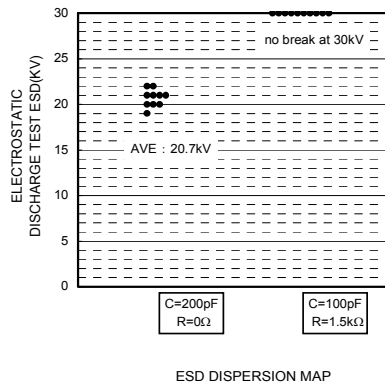
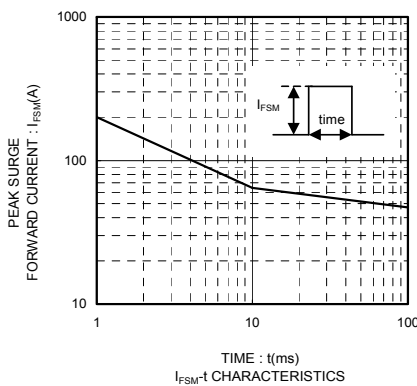
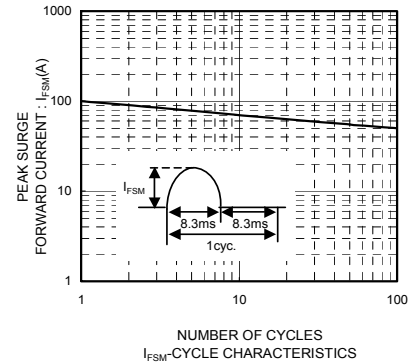
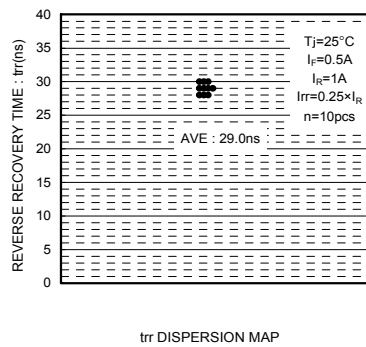
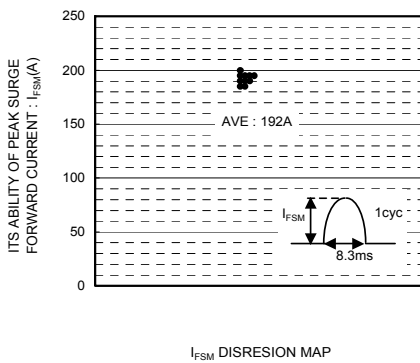
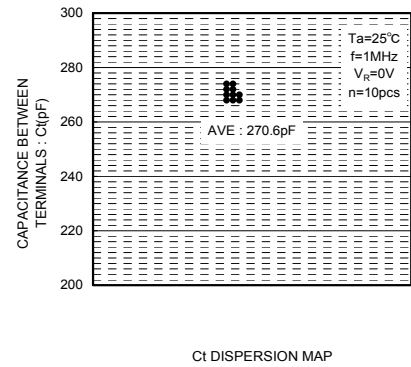
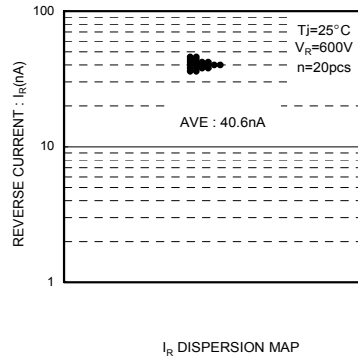
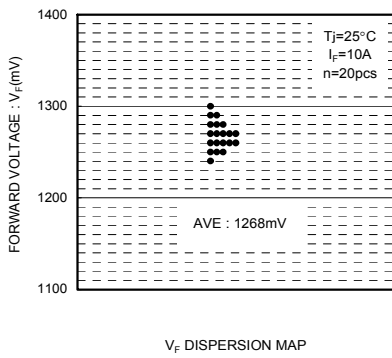
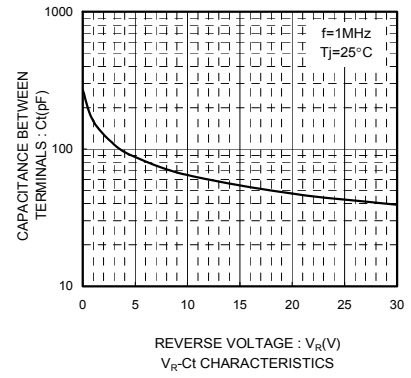
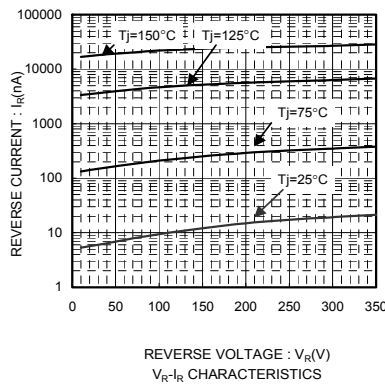
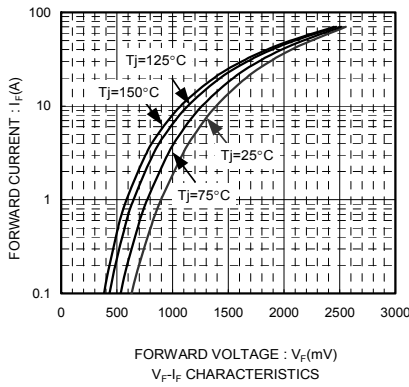
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V _{RM}	Duty ≤ 0.5	600	V
Reverse voltage	V _R	Direct voltage	600	V
Average rectified forward current	I _o	60Hz half sin wave, Resistance load, T _c =78°C	10	A
Forward current surge peak	I _{FSM}	60Hz half sin wave, Non-repetitive one cycle peak value, T _j =25°C	100	A
Junction temperature	T _j		150	°C
Storage temperature	T _{stg}		-55 to +150	°C

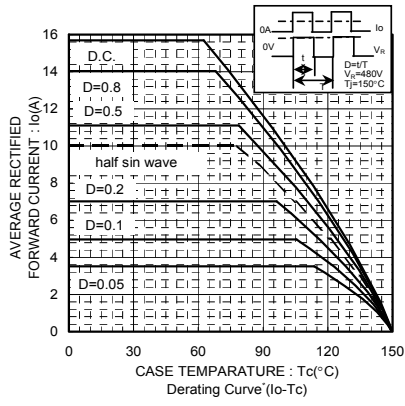
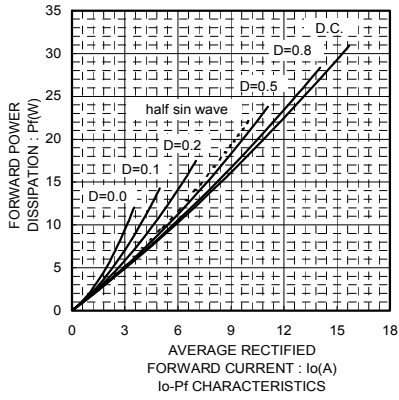
●Electrical characteristics (T_j=25°C)

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×I _R	-	30	40	ns
Thermal resistance(*)	R _{th(j-c)}	junction to case	-	-	3.5	°C/W

(*) : Design assurance without measurement.

●Electrical characteristics curves





Notes

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