

Super Fast Recovery Diode

RFUS20TF6S

●Series

Ultra Fast Recovery

●Applications

General rectification

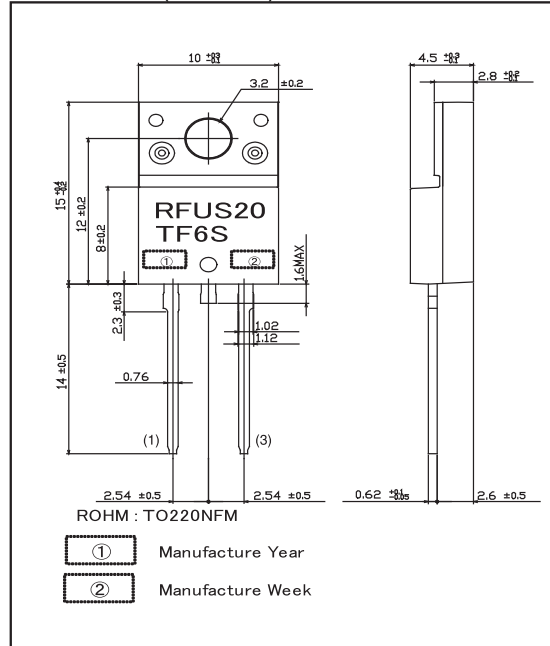
●Features

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

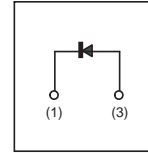
●Construction

Silicon epitaxial planer

●Dimensions (Unit : mm)



●Structure



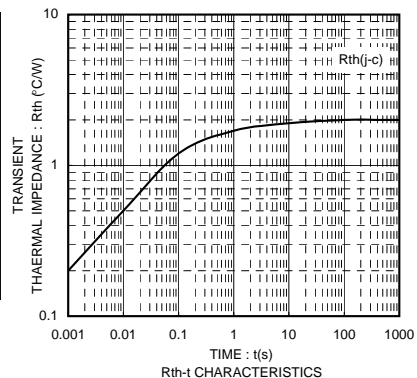
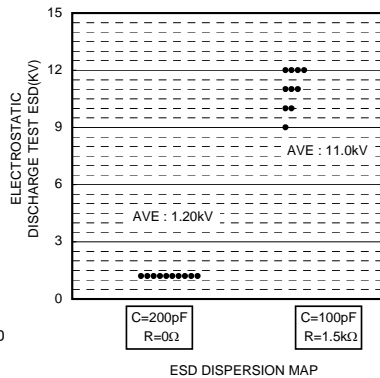
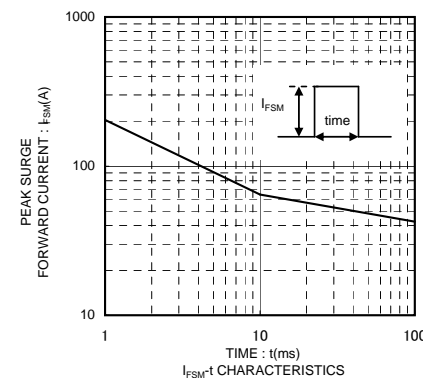
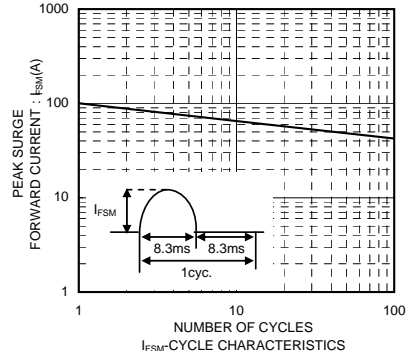
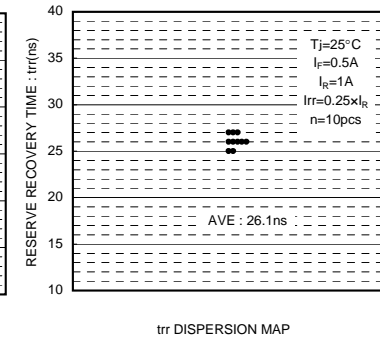
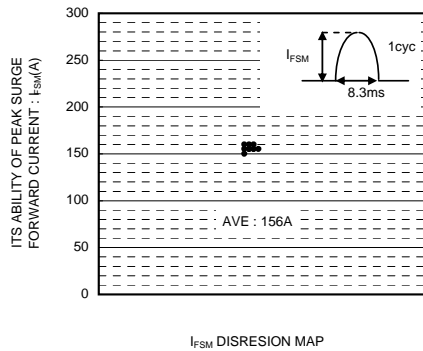
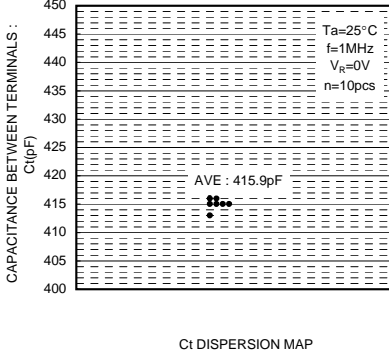
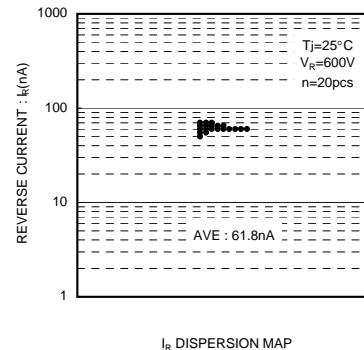
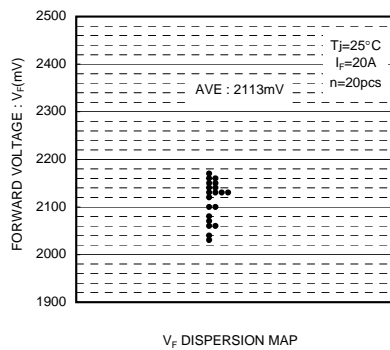
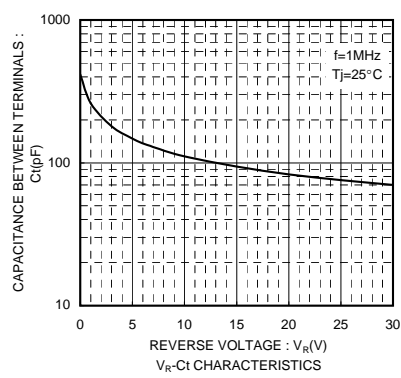
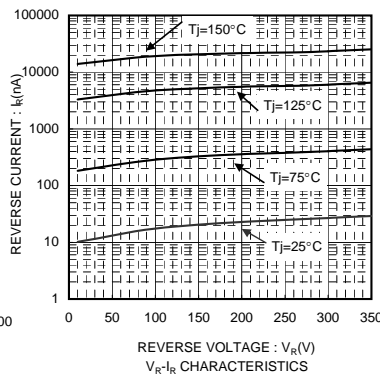
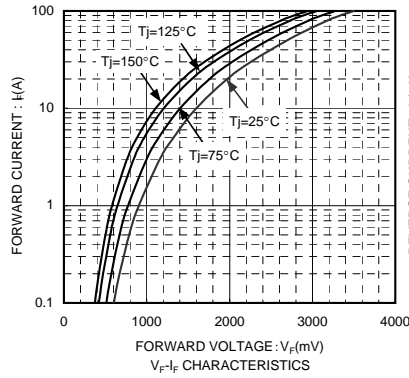
●Absolute maximum ratings (Tc=25°C)

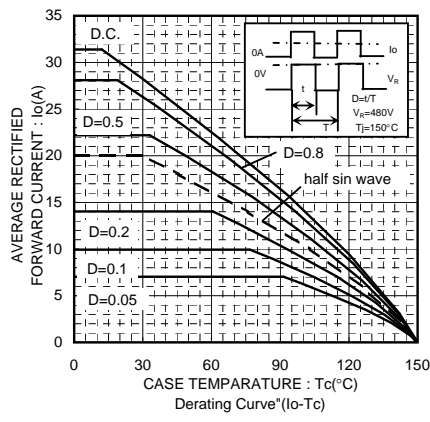
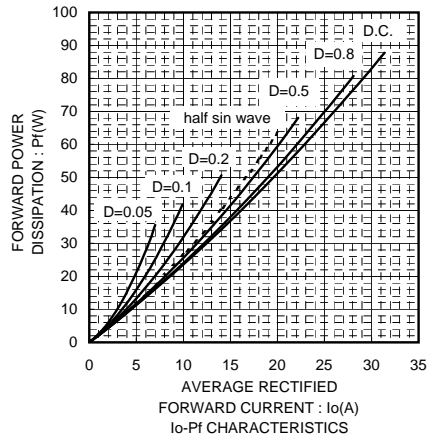
| Parameter | Symbol | Conditions | Limits | Unit |
|-----------------------------------|-----------|-------------------------------------------------------------------|-----------|------|
| Repetitive peak reverse voltage | V_{RM} | Duty \leq 0.5 | 600 | V |
| Reverse voltage | V_R | Direct voltage | 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 | | -55to+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 | 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 | - | - | 2 | °C/W |

●Electrical characteristic curves





Notes

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