

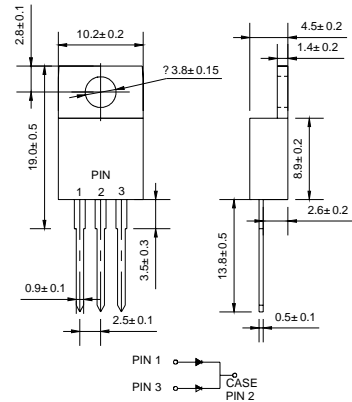


Features

- ✧ Low switching losses, high efficiency
- ✧ Low forward voltage drop
- ✧ Ultrafast recovery times
- ✧ Solder Dip 260°C, 10 seconds
- ✧ The plastic material carries U/L recognition 94V-0
- ✧ Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

Mechanical Data

- ✧ **Case:** JEDEC TO-220AB, molded plastic over
- ✧ **Terminals:** Matte tin plated leads
- ✧ **Polarity:** As marked
- ✧ **Weight:** 0.071 ounce, 2.006 gram
- ✧ **Mounting Position:** Any



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate by 20%.

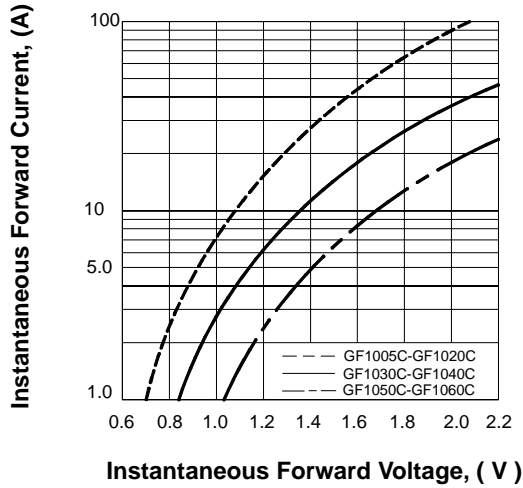
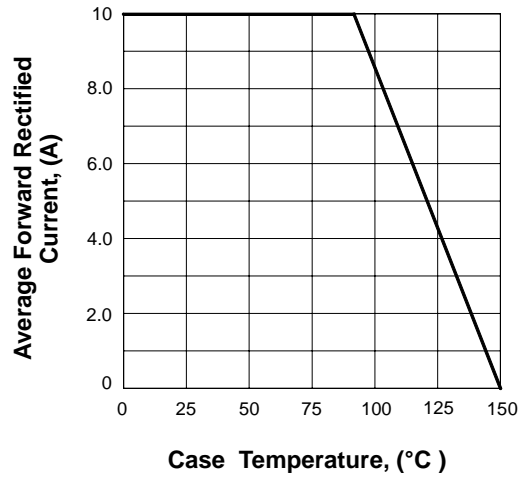
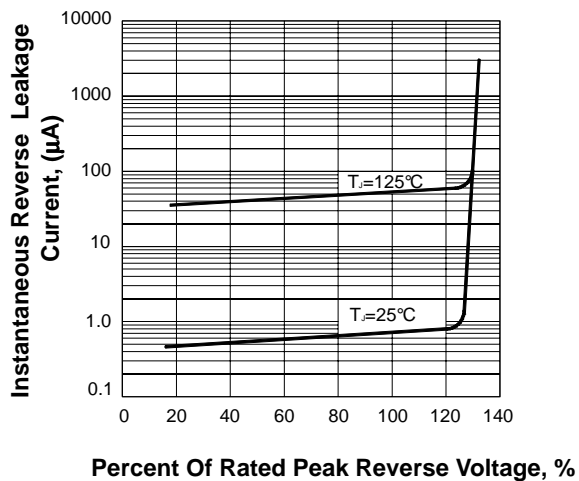
| Parameter | Symbol | GF10 05C | GF10 10C | GF10 20C | GF10 30C | GF10 40C | GF10 50C | GF10 60C | UNITS |
|---|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------|
| Maximum recurrent peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 300 | 400 | 500 | 600 | V |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 140 | 210 | 280 | 350 | 420 | V |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 300 | 400 | 500 | 600 | V |
| Maximum average forward rectified current @ $T_C=95^\circ\text{C}$ (Note 1) | $I_{(AV)}$ | 10 | | | | | | | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load @ $T_J=125^\circ\text{C}$ | I_{FSM} | 80 | | | | | | | A |
| Maximum instantaneous forward voltage at 5.0A (Note 2) | V_F | 0.98 | | 1.3 | | 1.7 | | V | |
| Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$ | I_R | 5.0 150 | | | | | | | μA |
| Maximum reverse recovery time (Note 3) | t_{rr} | 30 | | | | | | | ns |
| Operating junction temperature range | T_J | -55---+150 | | | | | | | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | -55---+150 | | | | | | | $^\circ\text{C}$ |

NOTES: 1. Averaged over any 20ms period.

2. Pulse test: 300 μs pulse width, 1% duty cycle.

3. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$.

Ratings AND Characteristic Curves

FIG.1 TYPICAL FORWARD CHARACTERISTICS

FIG.2 FORWARD DERATING CURVE

FIG.3 TYPICAL REVERSE CHARACTERISTICS

FIG.4 PEAK FORWARD SURGE CURRENT
