

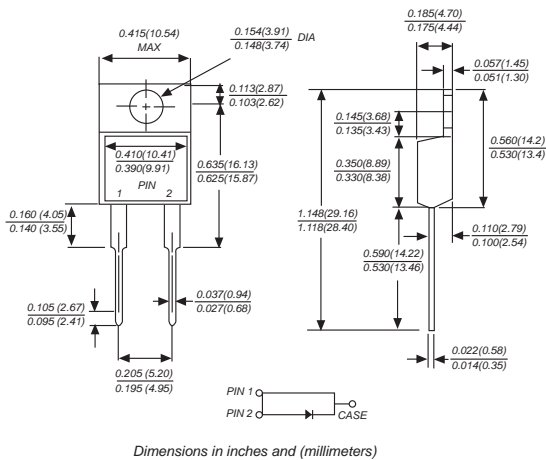


SF1660

ULTRAFAST RECOVERY RECTIFIERS

Reverse Voltage - 600 Volts Forward Current - 16 Amperes

TO-220AC



FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C, 0.25" (6.35mm) from case for 10 seconds

MECHANICAL DATA

Case: TO-220AC molded plastic body
Terminals: Leads solderable per MIL-STD-750, Method 2026
Polarity: As marked
Mounting Position: Any
Weight: 0.064 ounce, 1.81 grams

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 current derate by 20%.

| MDD Catalog Number | SYMBOLS | SF1660 | UNITS |
|---|-----------------|-------------|--------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 600 | VOLTS |
| Maximum RMS voltage | V_{RMS} | 420 | VOLTS |
| Maximum DC blocking voltage | V_{DC} | 600 | VOLTS |
| Maximum average forward rectified current (see fig.1) | $I_{(AV)}$ | 16 | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 150 | Amps |
| Maximum instantaneous forward voltage at 16A | V_F | 1.7 | Volts |
| Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$ | I_R | 50 500 | μA |
| Typical junction capacitance | C_J | 50 | pF |
| Maximum thermal resistance (NOTE 2) | $R_{\theta JC}$ | 5.5 | $^\circ\text{C/W}$ |
| Maximum Reverse Recovery Time(Note1) | T_{rr} | 35 | nS |
| Operating Junction and Storage temperature range | T_J, T_{STG} | -55 to +150 | $^\circ\text{C}$ |

Note: 1. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$.
 2. Thermal resistance from Junction to ambient and from junction to lead 0.375" (9.5mm) P.C.B mounte



RATINGS AND CHARACTERISTIC CURVES SF1660

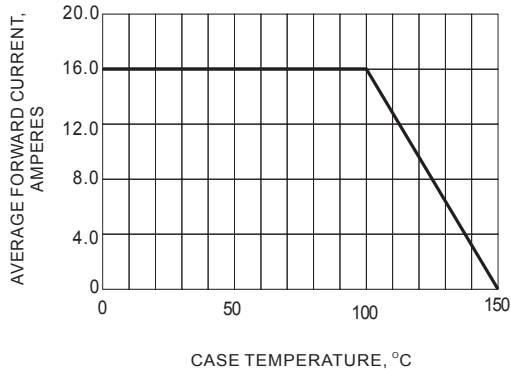


Fig.1 FORWARD CURRENT DERATING CURVE

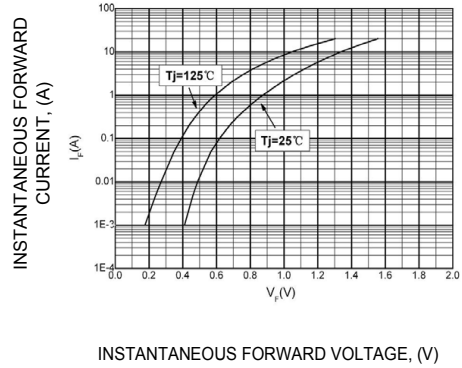


Fig.2 FORWARD CHARACTERISTICS

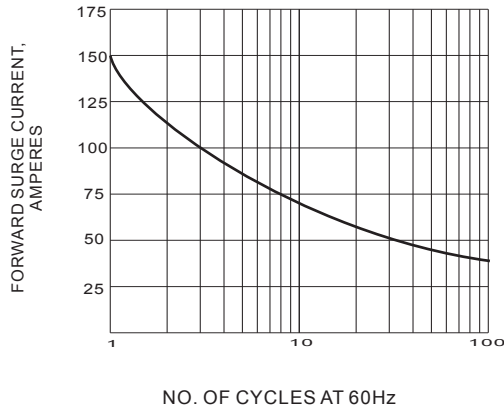


Fig.3 PEAK FORWARD SURGE CURRENT

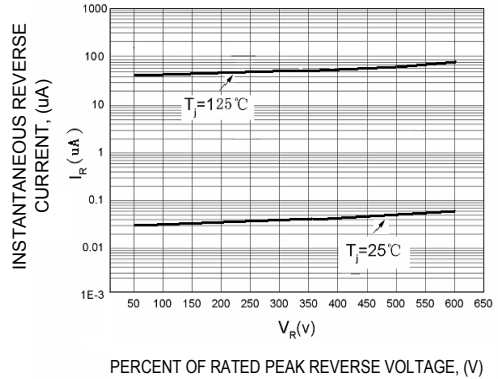


Fig.4 TYPICAL REVERSE CHARACTERISTICS

The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考!)



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