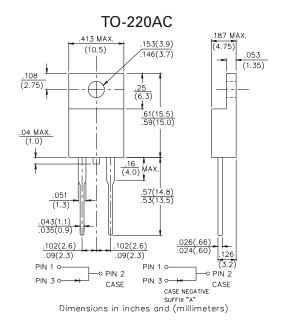
SF801 thru SF807

SUPERFAST RECOVERY RECTIFIER

VOLTAGE - 50 TO 600 VOLTS CURRENT - 8.0 AMPERES







- · Low forward voltage drop
- · High Current Capability
- High reliability
- High surge Current Capability
- $\bullet \ \text{Good for switching mode application}\\$
- High temperature soldering : 260°C/10seconds at terminals
- Pb free product are available: 99% Sn above can meet RoHS
- environment substance directive request

MECHANICAL DATA

Case: TO220AC Molded plastic Epoxy: UL 94V-0 rate flame retardant

Lead: Lead solderable per

MIL-STD-202, Method 208 guranteed

Polarity: As Marked Mounting Position: Any Weight: 2.24gram

MAXIMUM RATIXGS 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 current by 20%

| PARAMETER | SF801 | SF802 | SF803 | SF804 | SF805 | SF806 | SF807 | UNITS |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Repetitive Peak Reverse Voltage | 50 | 100 | 150 | 200 | 300 | 400 | 600 | Volts |
| Maximum RMS Voltage | 35 | 70 | 105 | 140 | 210 | 320 | 420 | Volts |
| Maximum DC Blocking Voltage | 50 | 100 | 150 | 200 | 300 | 400 | 600 | Volts |
| Maximum Average Forward Rectified Current .375 $^{\prime\prime}$ (9.5mm) Lead Length at Tc=100 $^{\circ}$ C | 8.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) | 125 | | | | | | | Amps |
| Maximum Instandeous Forward Voltage at 8.0A | 0.95 | | | | 1 | .3 | 1.7 | Volts |
| Maximum DC Reverse Current T _A =25°C at Rated DC Blocking Voltage T _A =100°C | 10 500 | | | | | | | μ Α |
| Maximum Reverse Recovery Time (Note 1) | 35 | | | | | 50 | 50 | |
| Typical Junction Capacitance (Note 2) | 50 | | | | | | | рF |
| Operating and Storage Temperature Range TJ,TSTG | -55 to +150 | | | | | | | °C |

NOTES:

- 1. Reverse Recovery Time test condition I $_{\text{F}}{=}0.5\text{A}$, I $_{\text{R}}{=}1.0\text{A}$, I $_{\text{RR}}{=}0.25\text{A}$
- 2. Measured at 1.0MHz and applied reverse Voltage of 4.0V D.C



SF801 thru SF807

SUPERFAST RECOVERY RECTIFIER

RATINGS AND CHARACTERISTIC CURVES SF801 THRU SF807

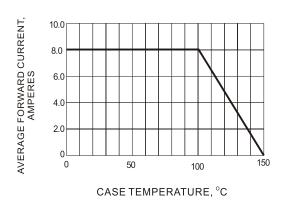


Fig.1- FORWARD CURRENT DERATING CURVE

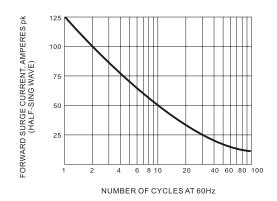


Fig.2- TMAXIMUM NON - REPETITIVE SURGE CURRENT

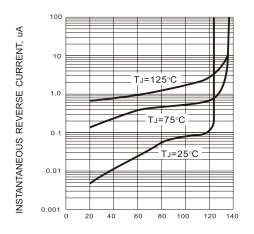
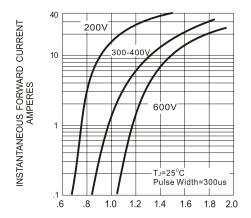


Fig.3- TYPICAL REVERSE CHARACTERISTIC

PERCENT OF INSTANTANEOUS REVERSE VOLTAGE,(%)



INSTANTANEOUS FORWARD VOLTAGE, VOLTS
Fig.4- TYPICAL INSTANTANEOUS FORWARD
CHRACTERISTIC

