

SUPER FAST RECTIFIERS

REVERSE VOLTAGE - 50 to 600Volts
FORWARD CURRENT - 8.0 Amperes

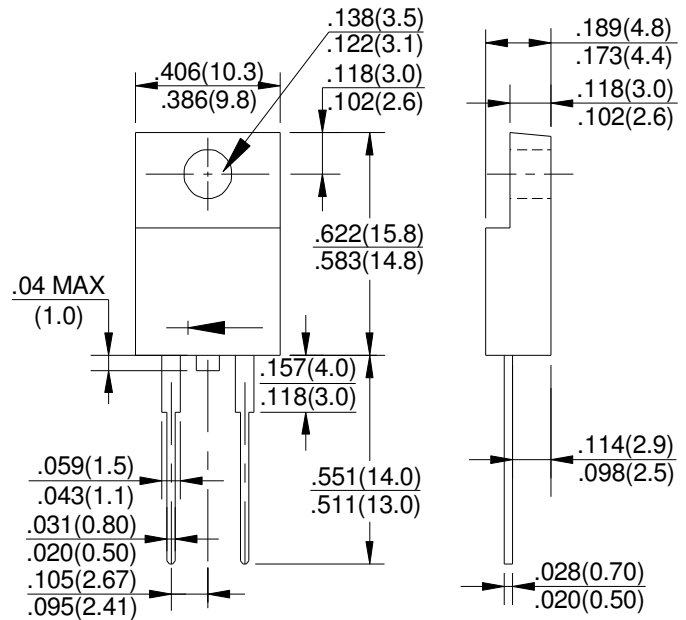
FEATURES

- Super fast switching time for high efficiency
- Low forward voltage drop
High current capability
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case: ITO-220AC molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Mounting position :Any
- Weight: 2.24 grams

ITO-220AC



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| CHARACTERISTICS | SYMBOL | SFF801 | SFF802 | SFF803 | SFF804 | SFF805 | SFF806 | SFF808 | UNIT |
|------------------------------------------------------------------------------------------------------|----------------------------------|--------------|--------|--------|--------|--------|--------|--------|------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 150 | 200 | 300 | 400 | 600 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 105 | 140 | 210 | 280 | 420 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 150 | 200 | 300 | 400 | 600 | V |
| Maximum Average Forward Rectified Current @T _A =75 °C | I(AV) | 8.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method) | I _{FSM} | 125 | | | | | | | A |
| Peak Instantaneous Forward Voltage at 8.0A DC | V _F | 1.0 | | | 1.3 | | 1.7 | | V |
| Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C | I _R | 10 150 | | | | | | | μA |
| Maximum Reverse Recovery Time(Note1) | T _{RR} | 35 | | | | | | | nS |
| Typical Junction Capacitance (Note2) | C _J | 40 | | | | | | | pF |
| Typical Thermal Resistance (Note3) | R _{θJA} | 5 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _J ,T _{STG} | -55 to + 150 | | | | | | | °C |

NOTES:1.Measured with I_F=0.5A,I_R=1A,I_{RR}=0.25A

2.Measured at 1.0 MHZ and applied reverse voltage of 4.0V DC.

3.Thermal resistance junction to ambient

FIG.1- TYPICAL FORWARD CURRENT DERATING CURVE

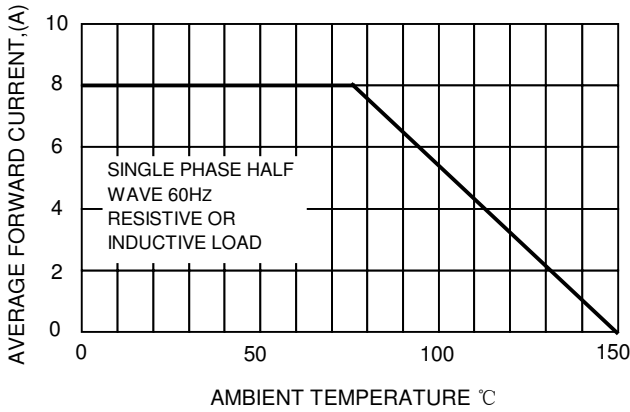


FIG.2-TYPICAL REVERSE CHARACTERISTICS

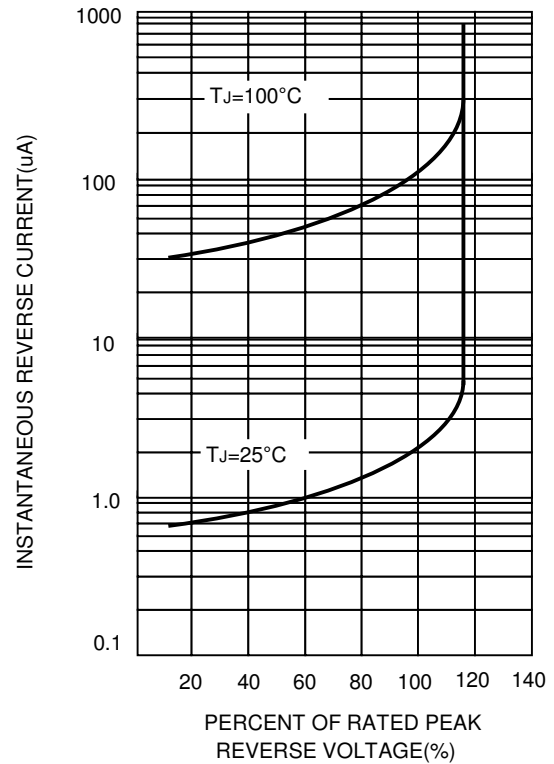


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

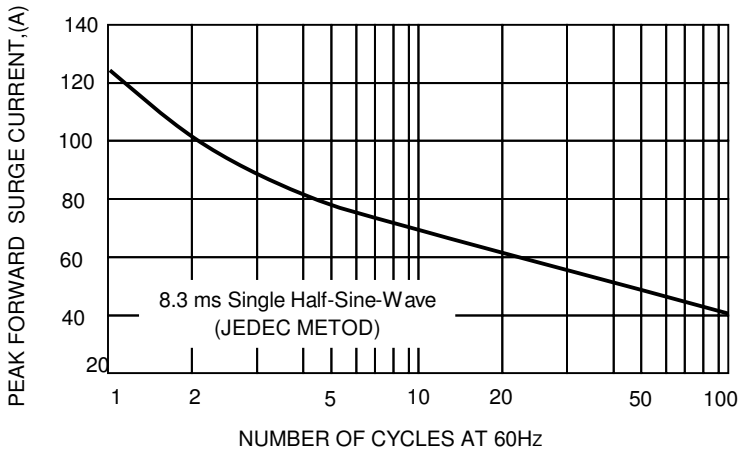


FIG.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

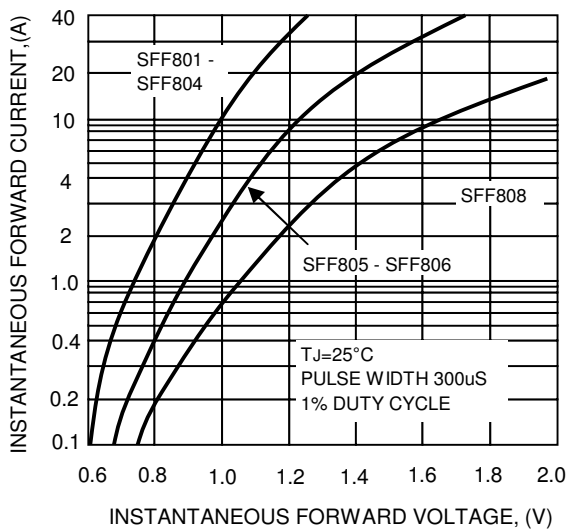


FIG.5-TYPICAL JUNCTION CAPACITANCE

