



## Glass Passivated Super Fast Recovery Rectifier

**Reverse Voltage - 50 to 600 Volts**  
**Forward Current - 8.0 Amperes**

### Features

- Fast switching for high efficiency
- Low cost
- Low reverse leakage current
- High current capability
- Low forward voltage drop
- Meet UL flammability classification 94V-0

### Mechanical Data

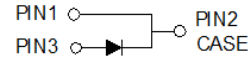
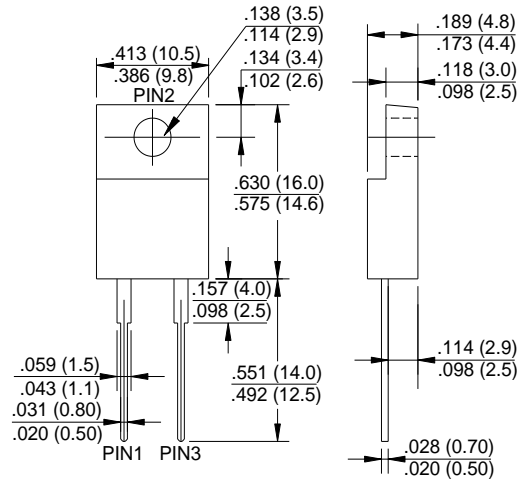
- Case: ITO-220AC Molded plastic
- Polarity: Polarity: As marked on the body
- Mounting position: Any

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

### Applications

- For use in SMPS, high frequency inverters, PWM and polarity protection applications

### ITO-220AC



Package Outline Dimensions in Inches (Millimeters)

### 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 Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =75°C	I <sub>(AV)</sub>	8.0							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	125							A
Peak Forward Voltage at 8.0A DC (Note1)	V <sub>F</sub>	1.0			1.3		1.7		V
Maximum DC Reverse Current @ T <sub>J</sub> =25°C	I <sub>R</sub>	10							μA
at Rated DC Blocking Voltage @T <sub>J</sub> =100°C		500							
Maximum Reverse Recovery Time (Note 2)	t <sub>rr</sub>	35							nS
Operating Junction Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150							°C

Notes: 1. 300uS pulse width, 2%duty cycle.

2. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>RR</sub>=0.25A .

3. The typical data above is for reference only



Fig. 1 - Forward Current Derating Curve

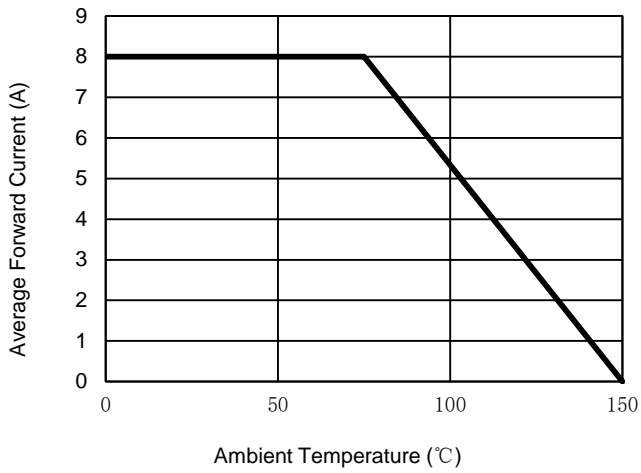


Fig. 2 - Maximum Non-Repetitive Surge Current

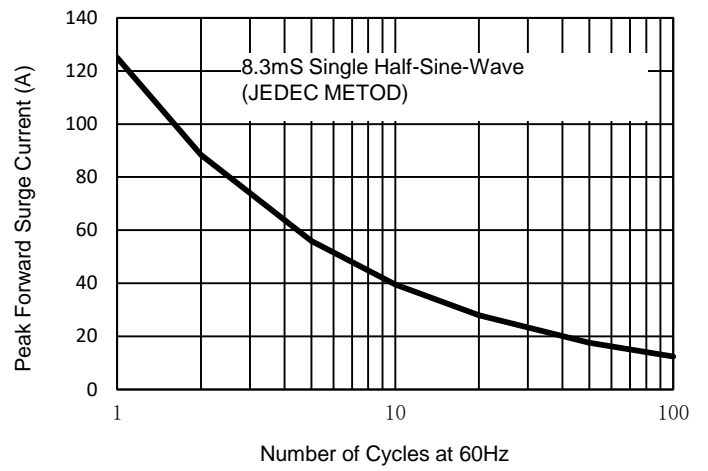


Fig. 3 - Typical Reverse Characteristics

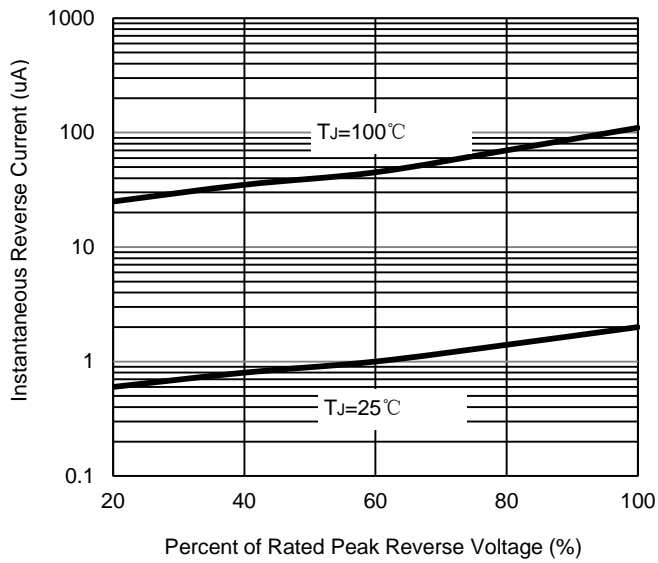
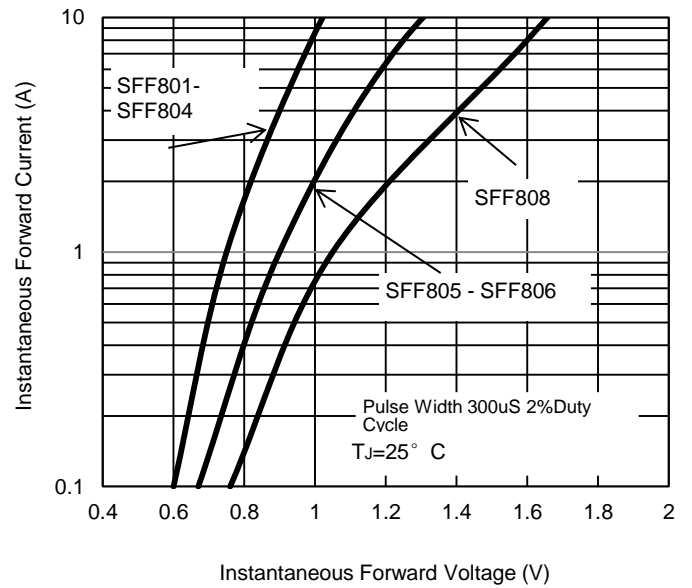


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.



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ALL specifications and data are subject to be changed without notice to improve reliability function or design or other reasons.

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