



Super Fast Recovery Rectifiers

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.

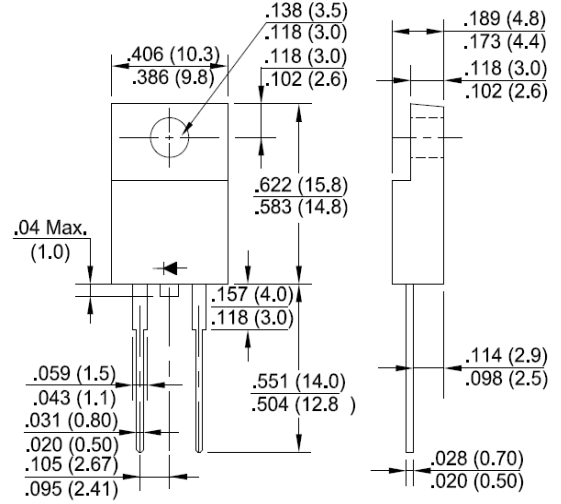
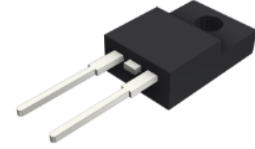
Applications

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

ITO-220AC



RoHS
COMPLIANT



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 _{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, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	125							A
Peak Forward Voltage at 8.0A DC (Note1)	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 (Note 2)	T _{RR}	35							nS
Typical Junction Capacitance (Note3)	C _J	40							pF
Typical Thermal Resistance Junction to Ambient	R _{θJA}	5							°C/W
Operating Junction Temperature Range	T _J , T _{STG}	-55 to + 150							°C

- Notes: 1. 300uS pulse width, 2%duty cycle.
2. Measured with I_F=0.5A, I_R=1A, I_{RR}=0.25A .
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
4. The typical data above is for reference only



Fig. 1 - Forward Current Derating Curve

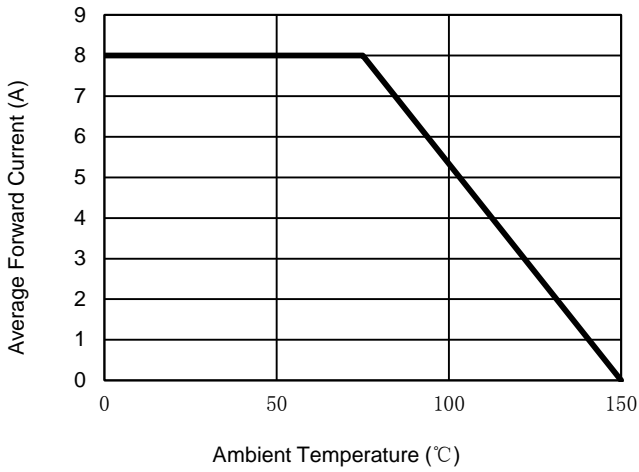


Fig. 2 - Maximum Non-Repetitive Surge Current

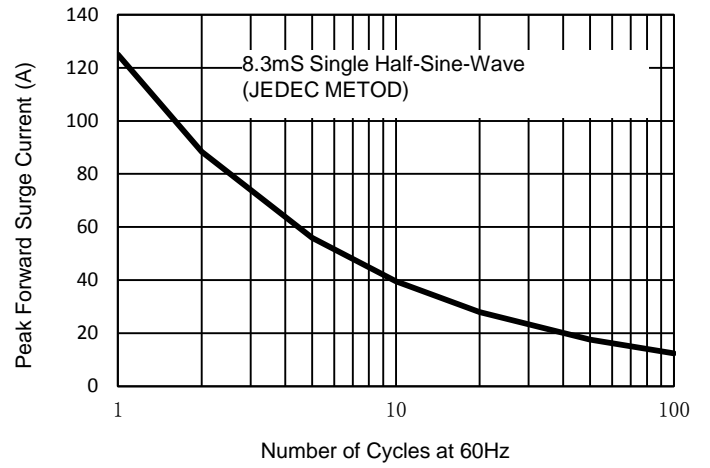


Fig. 3 - Typical Reverse Characteristics

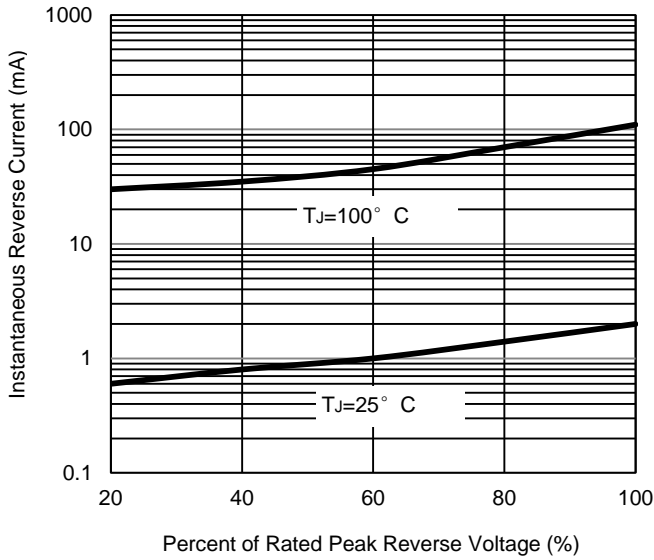


Fig. 4 - Typical Forward Characteristics

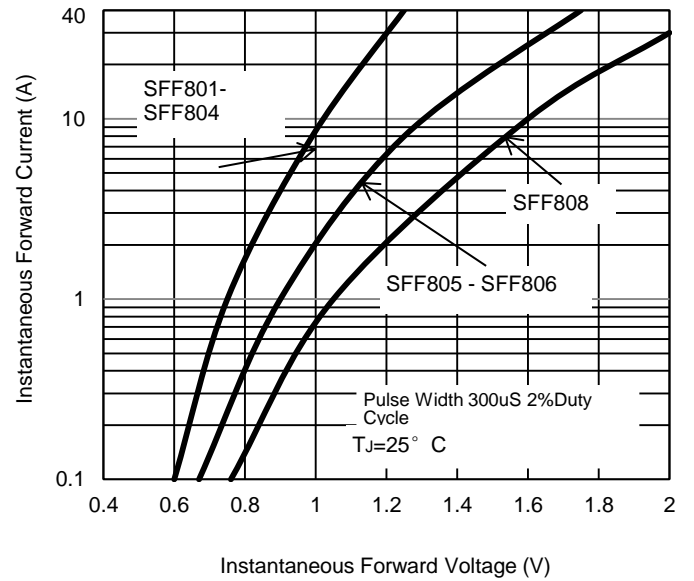
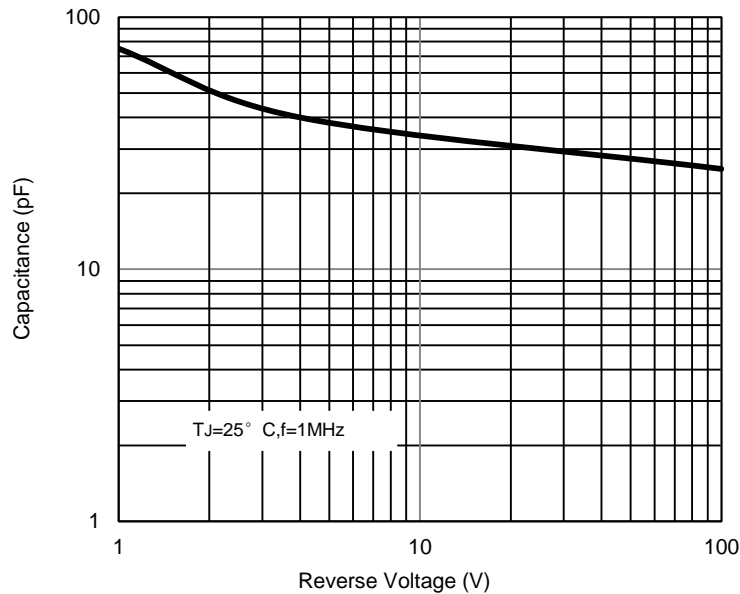


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.



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