



SUPERFAST RECTIFIER DATA SHEET

FEATURES

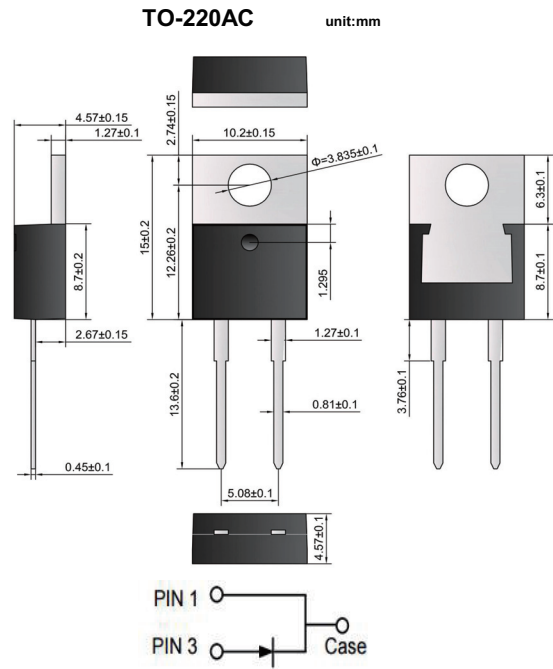
- Fred Chip Construction
- SuperFast Switching,High Efficiency
- Low Forward Voltage Drop
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-0

MECHANICAL DATA

- Case: TO-220AC Type, Molded Plastic
- Terminals:Pure tin Plated ,Lead Free Solderable Per MIL-STD-202, Method 208
- Polarity: As marked
- Weight: 1.9 grams(approx)
- Mounting Position:Any

TYPICAL APPLICATIONS

- For use in High Frequency Rectifier of Switching Mode Power Supplies, Freewheeling Diode, DC/DC Converters or polarity Protection Application



Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	UF 801	UF 802	UF 803	UF 804	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	100	200	300	400	V
Maximum RMS Voltage	V _{RMS}	70	140	210	280	V
Maximum DC Blocking Voltage	V _{DC}	100	200	300	400	V
Maximum Average Forward Rectified Current	I _{F(AV)}	8				A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	80				A
Maximum Forward Voltage at 8A	V _F	0.95	1.3			V
Maximum Reverse Recovery Time (Note.1)	T _{RR}	35				ns
Maximum DC Reverse Current at T _J =25°C Rated DC Blocking Voltag T _J =100°C	I _R			10	100	uA
Typical Thermal Resistance, Junction to Ambient	R _{θJA}	70.0				°C/W
Typical Thermal Resistance, Junction to Case	R _{θJC}	3.0				°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150				°C

Note: 1. Measured With I_F=0.5A, I_R=1.0A, I_{RR}=0.25A



RATINGS AND CHARACTERISTIC CURVES

Fig. 1 - Forward current derating curve

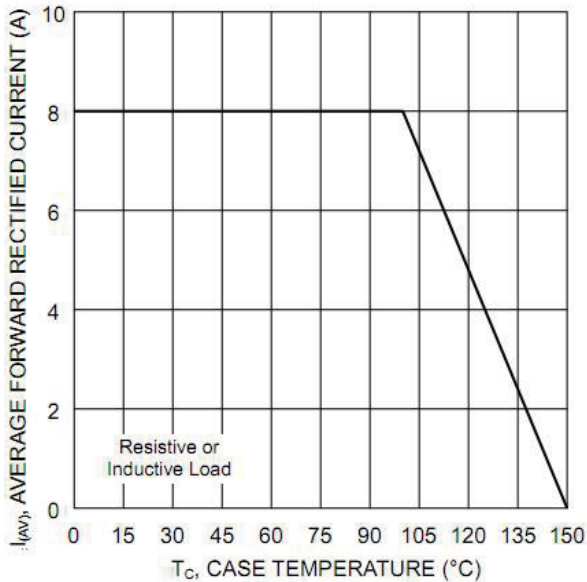


Fig. 2 - Maximum non-repetitive peak fwd surge current

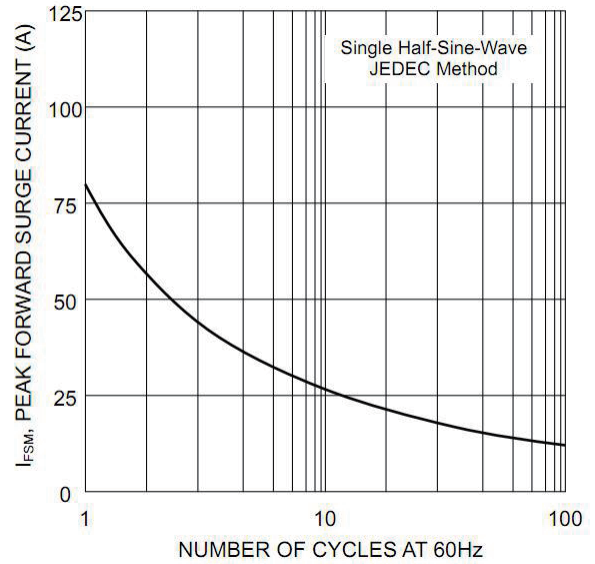


Fig.3 - Typical reverse characteristics

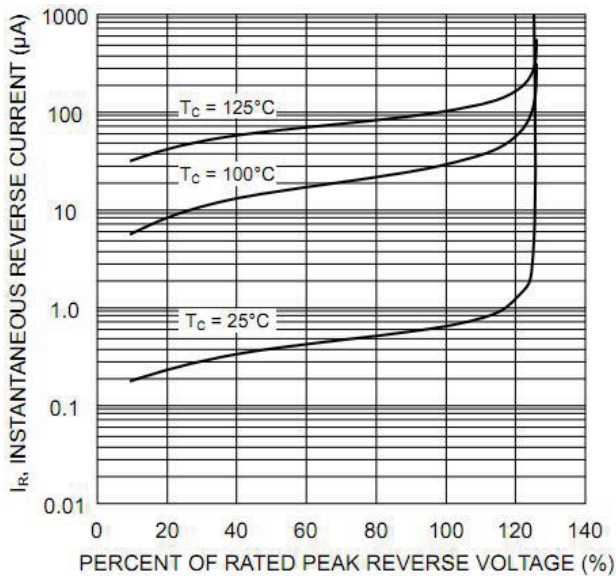
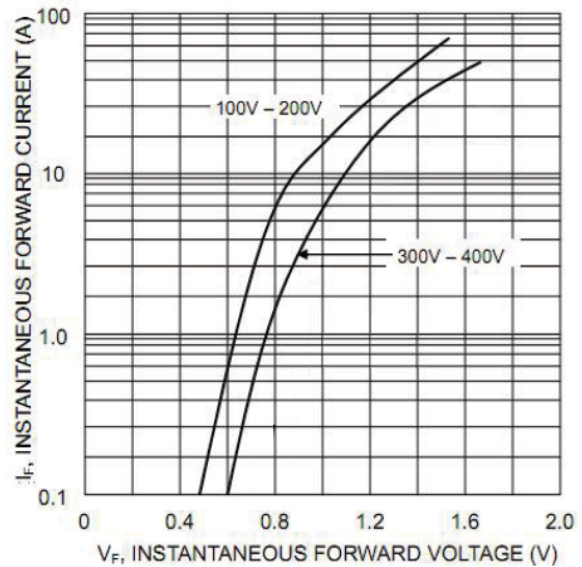


Fig. 4 - Typical forward characteristics





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