



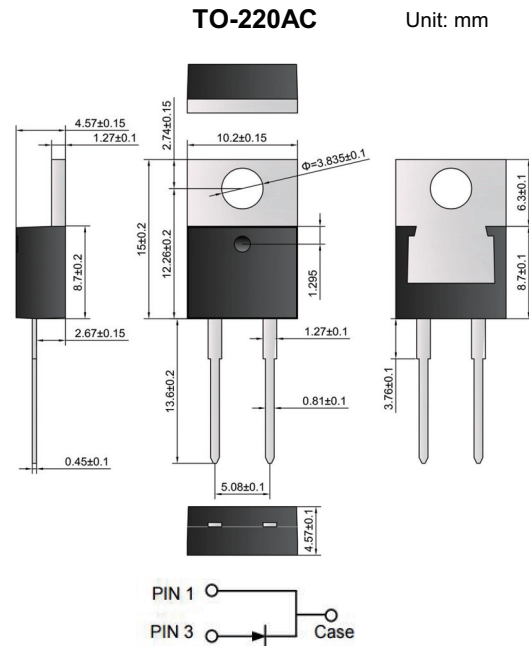
SUPERFAST RECTIFIER DATA SHEET

FEATURES

- Fred Chip Planar Construction
- Hyper Fast Recovery Time
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Plastic Case Material has UL Flammability Classification Rating 94V-O

MECHANICAL DATA

- Case: TO-220AC TYPE molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: as marked
- Weight: 1.9 grams (approx)
- Lead Free: For RoHS/Lead Free Version, Green molding compound as per IEC61249 Std



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

Parameter Symbol	Symbol	UF1512		Unit
Device marking code		UF1512		
Maximum repetitive peak reverse voltage	V _{RRM}	1200		V
Maximum RMS voltage	V _{RMS}	840		V
Maximum DC blocking voltage	V _{DC}	1200		V
Maximum average forward rectified current at T _C =100°C	I _{F(AV)}	15.0		A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{fsm}	200		A
Maximum instantaneous forward voltage at 15.0A	V _F	Typ.	Max.	V
		2.8	3.3	
Maximum DC revers current T _a =25°C	I _R	5		uA
Maximum DC revers current T _a =100°C		250		
Thermal Resistance Junction To Ambient	R _{thJA}	70		°C/W
Thermal Resistance Junction To Case	R _{thJC}	4.0		
Maximum Reverse Recovery Time (Note1)	T _{rr}	Typ.	Max.	nS
		35	50	
Operating temperature range	T _J	- 55 to + 175		°C
Storage temperature range	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

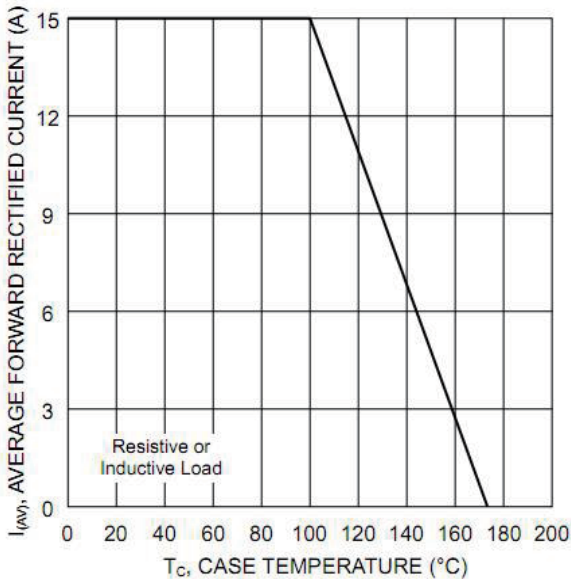


Fig. 2 - Forward surge current derating curve

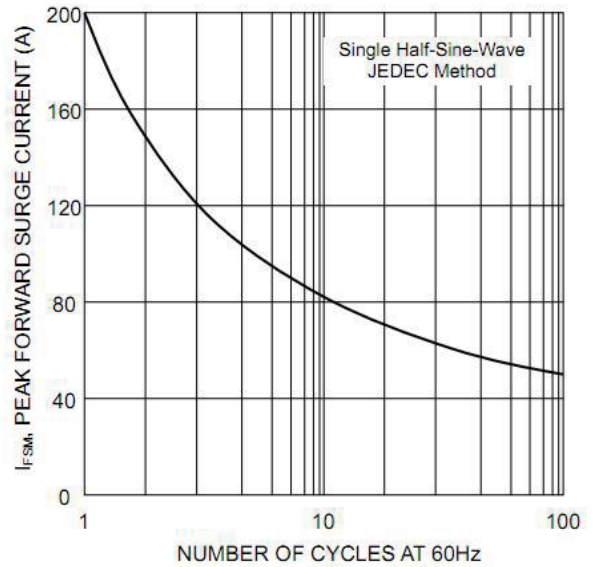


Fig.3 - Typical reverse characteristics

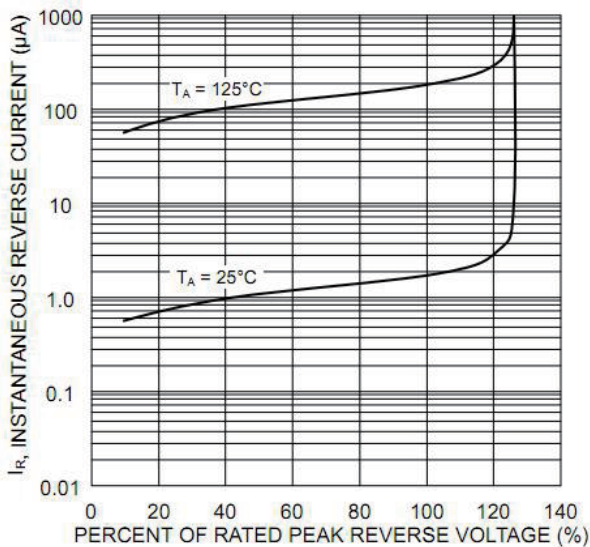
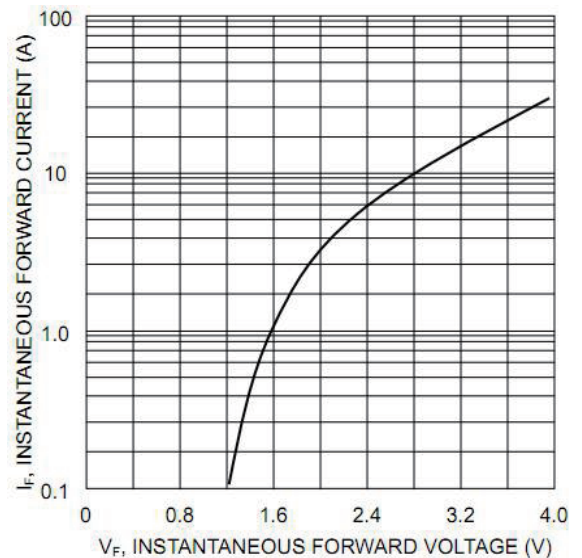


Fig. 4 - Typical forward characteristics





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