

UF1206

ULTRA FAST RECTIFIER DATA SHEET

FEATURES

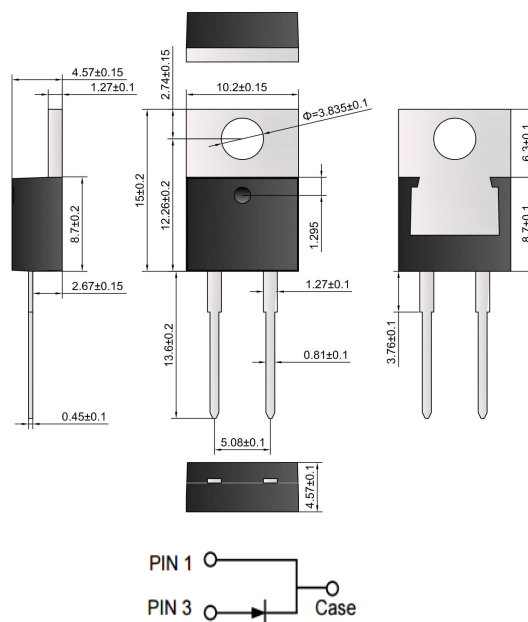
- Fred Chip Planar Construction
- Ultra Fast Recovery Time
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Plastic Case Material has UL Flammability Classification Rating 94V-O

APPLICATIONS

- 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

TO-220AC

unit:m



Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Parameter Symbol	Symbol	UF1206		Unit
Device marking code		UF1206		
Maximum repetitive peak reverse voltage	V_{RRM}	600		V
Maximum RMS voltage	V_{RMS}	420		V
Maximum DC blocking voltage	V_{DC}	600		V
Maximum average forward rectified current	$I_{F(AV)}$	8.0		A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{fsm}	150		A
Maximum instantaneous forward voltage at 12.0A	V_F	Typ.	Max.	V
		1.4	1.5	
Maximum DC revers current $T_a=25^\circ\text{C}$	I_R	5		uA
Maximum DC revers current $T_a=100^\circ\text{C}$		250		
Thermal Resistance Junction To Ambient	R_{thJA}	70		$^\circ\text{C}/\text{W}$
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 + 150		$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 to + 150		$^\circ\text{C}$

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

Fig 1. Forward current derating curve

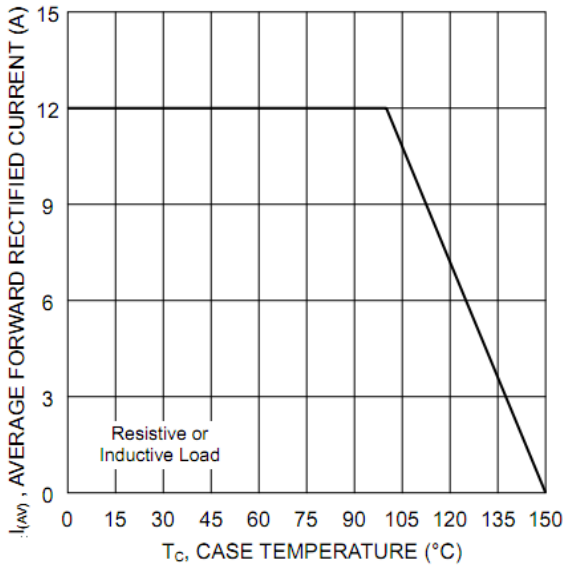


Fig 2. Forward surge current derating curve

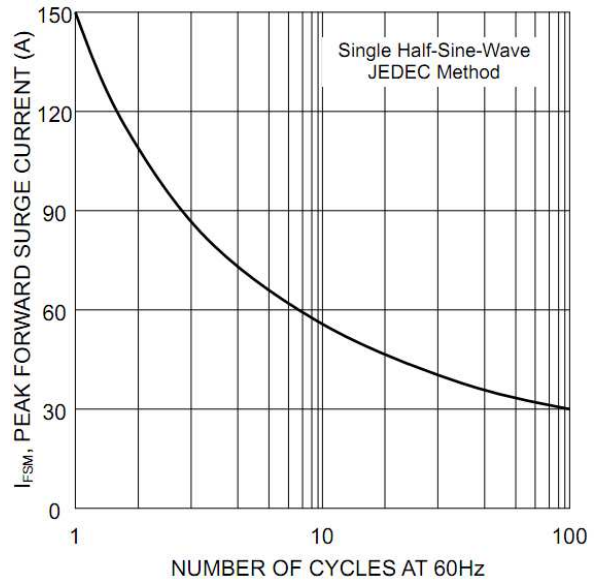


Fig 3. Typical reverse characteristics

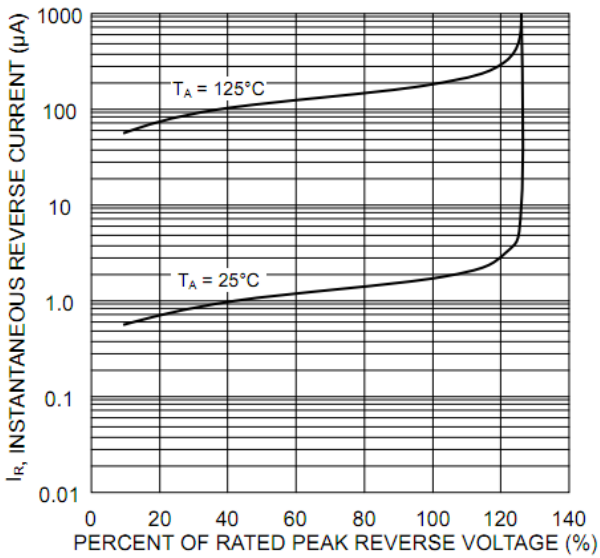


Fig 4. Typical forward characteristics

