

# UF1206

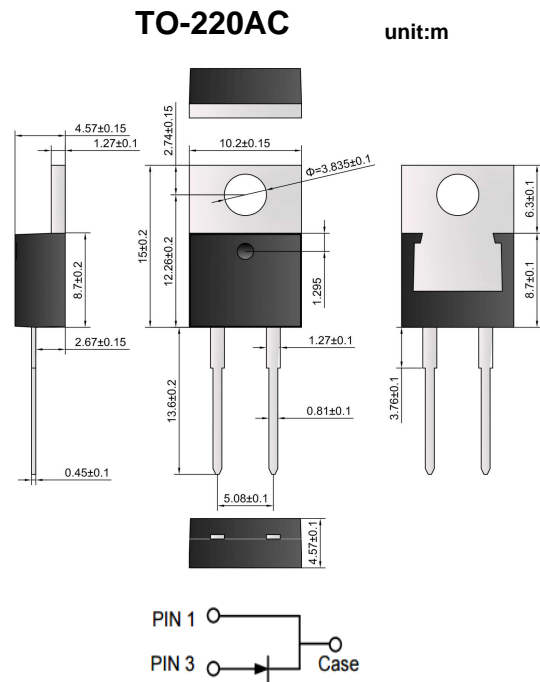
## ULTRA FAST RECTIFIER DATA SHEET

### 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



### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Parameter Symbol	Symbol	UF1206		Unit
Device marking code		<b>UF1206</b>		
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	<b>600</b>		V
Maximum RMS voltage	V <sub>RMS</sub>	<b>420</b>		V
Maximum DC blocking voltage	V <sub>DC</sub>	<b>600</b>		V
Maximum average forward rectified current	I <sub>F(AV)</sub>	<b>12</b>		A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>fsm</sub>	<b>150</b>		A
Maximum instantaneous forward voltage at 12.0A	V <sub>F</sub>	<b>Typ.</b>	<b>Max.</b>	V
		<b>1.4</b>	<b>1.5</b>	
Maximum DC revers current Ta=25°C	I <sub>R</sub>	<b>5</b>		uA
Maximum DC revers current Ta=100°C		<b>250</b>		
Thermal Resistance Junction To Ambient	R <sub>thJA</sub>	<b>70</b>		°C/W
Thermal Resistance Junction To Case	R <sub>thJC</sub>	<b>4.0</b>		
Maximum Reverse Recovery Time (Note1)	T <sub>rr</sub>	<b>Typ.</b>	<b>Max.</b>	nS
		<b>35</b>	<b>50</b>	
Operating temperature range	T <sub>J</sub>	<b>- 55 to + 150</b>		°C
Storage temperature range	T <sub>STG</sub>	<b>- 55 to + 150</b>		°C

**Note:** 1. Measured With I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A

Fig 1. Forward current derating curve

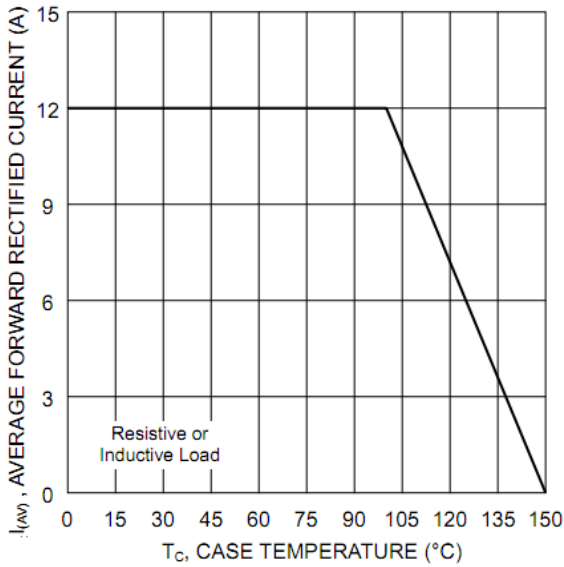


Fig 2. Forward surge current derating curve

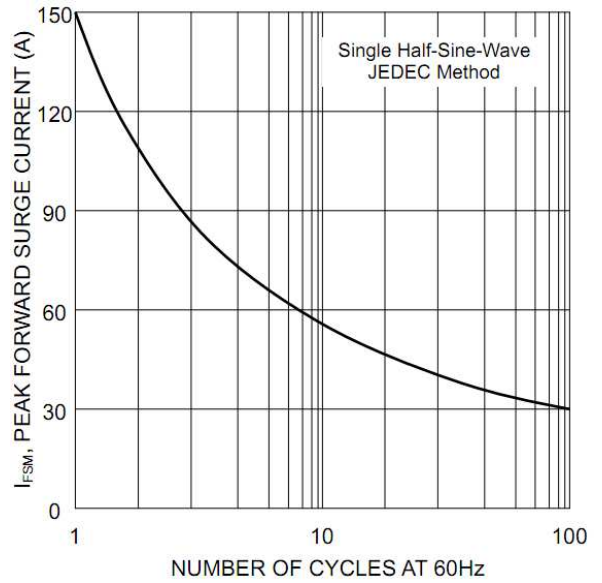


Fig 3. Typical reverse characteristics

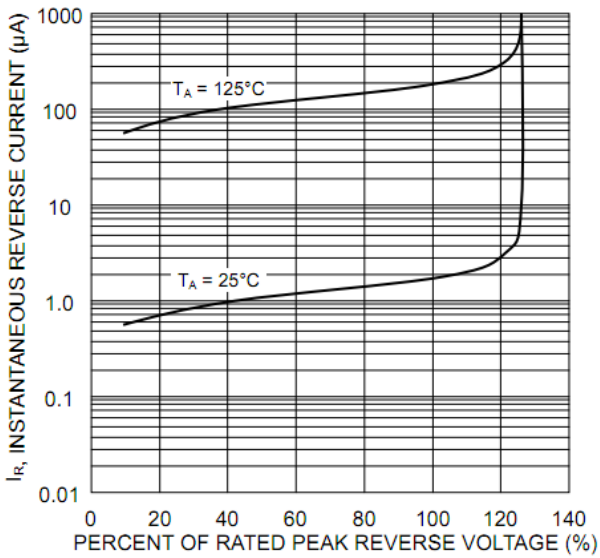


Fig 4. Typical forward characteristics

