

# **UF2AF THRU UF2MF**

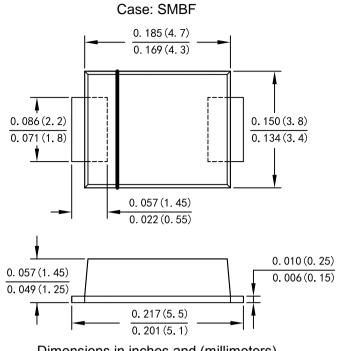
## 2.0AMP Surface Mount Glass Ultra Fast Rectifiers

#### **Features**

- . Low cost
- · Ultra fast switching for high efficiency
- · High current capability
- Plastic Case Material has UL Flammability Classification Rating 94V-0

#### **Mechanical Data**

- · Case: Molded plastic SMBF
- · Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number



Dimensions in inches and (millimeters)

### **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%

Type Number	SYMBOL	UF2AF	UF2BF	UF2DF	UF2GF	UF2JF	UF2KF	UF2MF	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Average Rectified Output Current @T∟ =100°C	IF(AV)	2.0							Α
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	lгsм	60							Α
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l²t	14.94							A <sup>2</sup> s
Forward Voltage @IF=2.0A	V <sub>FM</sub>	1.0 1.3 1.7						V	
Peak Reverse Current @T <sub>A</sub> =25 ℃	5.0								
At Rated DC Blocking Voltage @T <sub>A</sub> =125 ℃	I <sub>R</sub>		100						uA
Maximum Reverse Recovery Time (Note 1)	Trr	50 75					ns		
Typical Junction Capacitance (Note 2)	Сı	15							pF
Typical Thermal Resistance Junction to Ambient	Rø ja	65							°C/W
Operating Temperature Range	TJ	-55 to+150							$^{\circ}$
Storage Temperature Range	Тѕтс	-55 to +150							$^{\circ}$

#### Note:

- 1.Reverse Recovery Test Conditions:IF=0.5A,IR=1.0A,IRR=0.25A.
- 2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

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Average Forward Current (A)

I<sub>FSM</sub>, Peak Forward Surge Current (A)

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Fig. 1 Forward Current Derating Curve

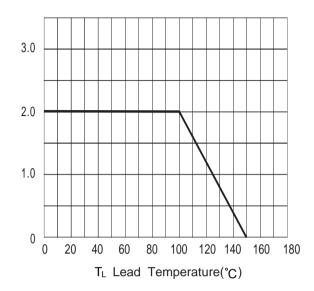


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

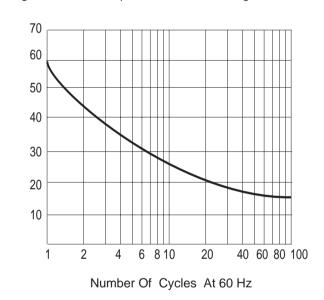


Fig.5 Typical Reverse Chracteristics

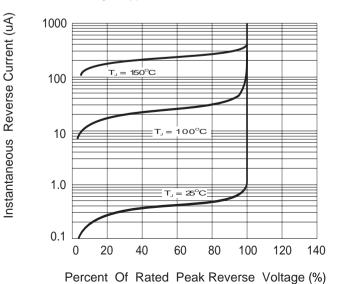


Fig. 2 Typ. Forward Characteristics

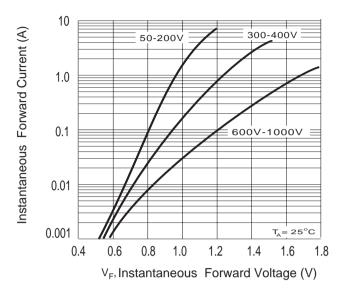
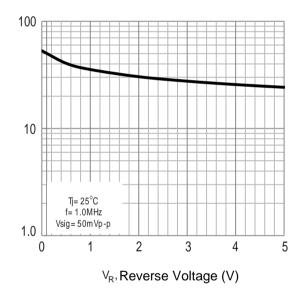
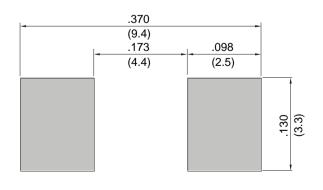


Fig.4 Typical Junction Capacitance



Capacitance, (pF)

Fig.6 Mounting PAD Layout



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