



UF1AFU THRU UF1MFU

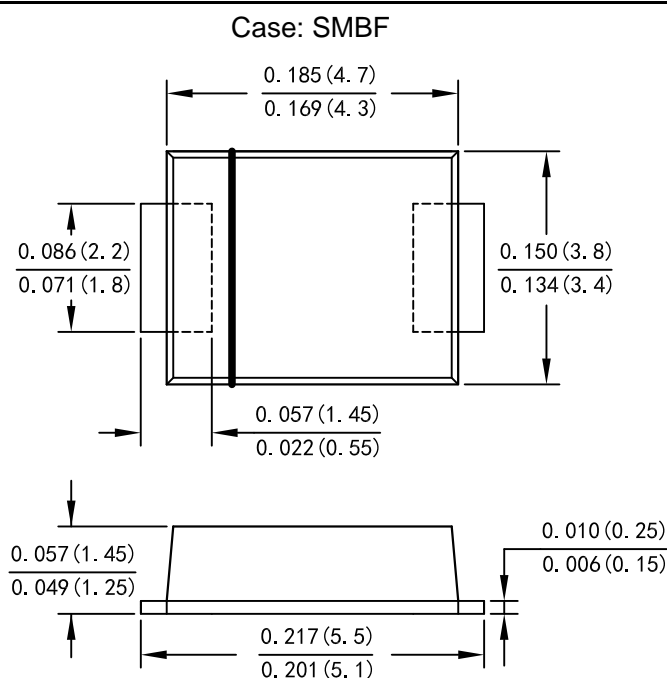
1.0AMP Surface Mount Glass Ultra Fast Rectifiers

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



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	UF1AFU	UF1BFU	UF1DFU	UF1GFU	UF1JFU	UF1KFU	UF1MFU	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Average Rectified Output Current @T _L =100 °C	I _{F(AV)}	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	35							A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	5.084							A ² s
Forward Voltage @IF=1.0A	V _{FM}	1.0			1.3	1.7			V
Peak Reverse Current @T _A =25 °C	I _R	5.0							uA
At Rated DC Blocking Voltage @T _A =125 °C		100							
Maximum Reverse Recovery Time (Note 1)	T _{rr}	50				75			ns
Typical Junction Capacitance (Note 2)	C _J	20							pF
Typical Thermal Resistance Junction to Ambient	R _{θJA}	65							°C/W
Operating Temperature Range	T _J	-55 to+150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

Note:

- 1.Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$.
2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C



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Fig. 1 Forward Current Derating Curve

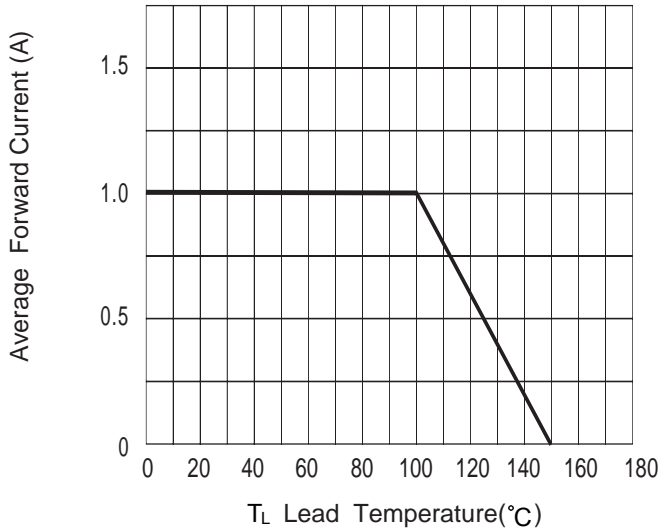


Fig. 2 Typ. Forward Characteristics

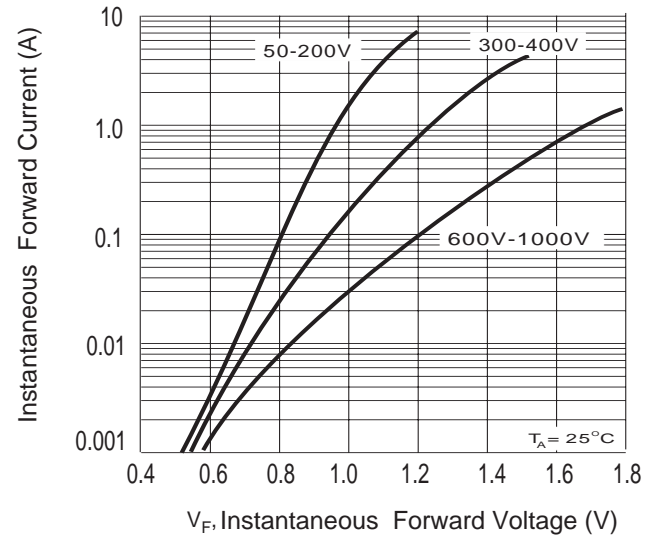


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

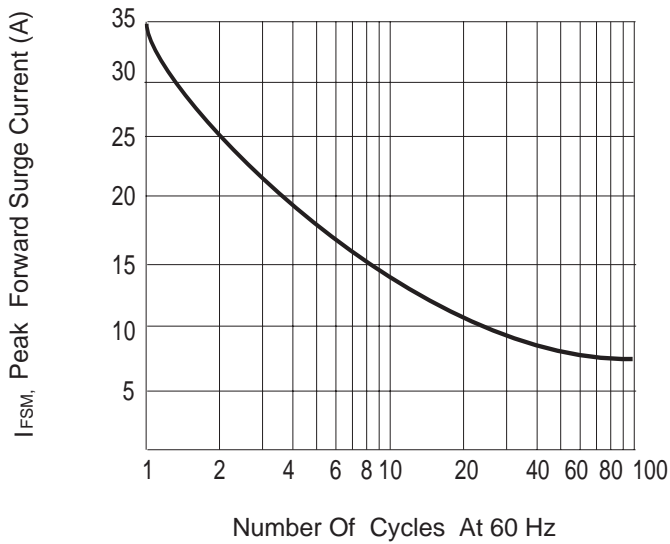


Fig.4 Typical Junction Capacitance

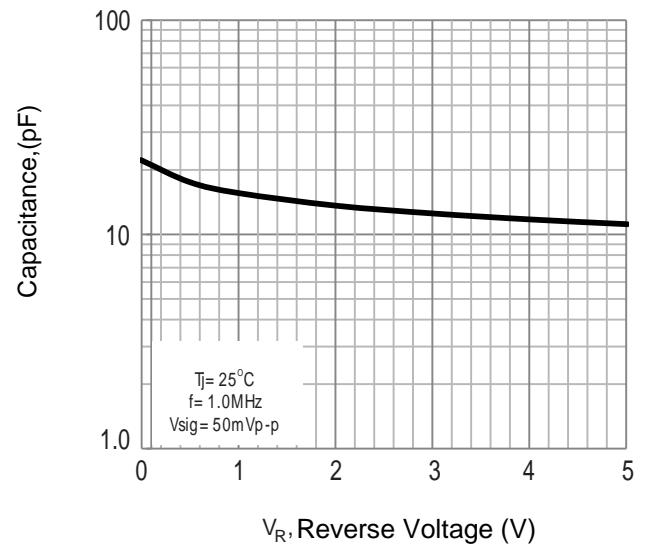


Fig.5 Typical Reverse Characteristics

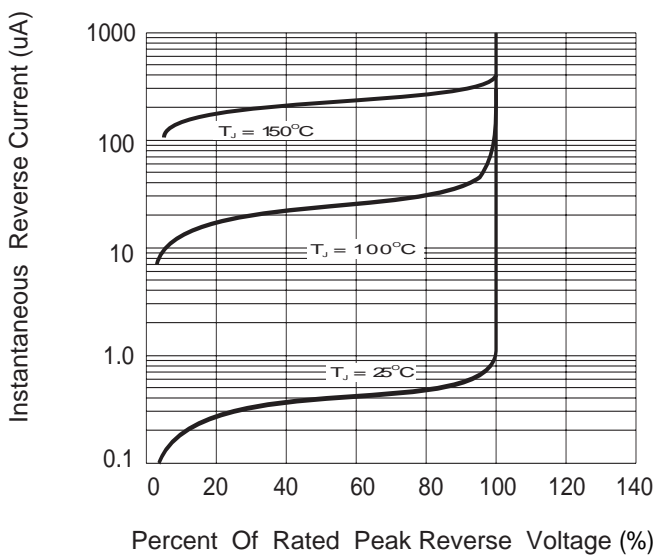
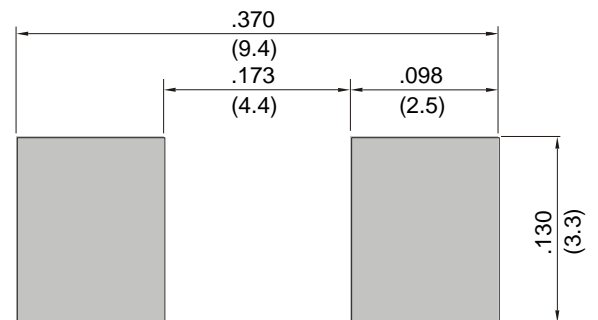


Fig.6 Mounting PAD Layout





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