



# FR2AF THRU FR2MF

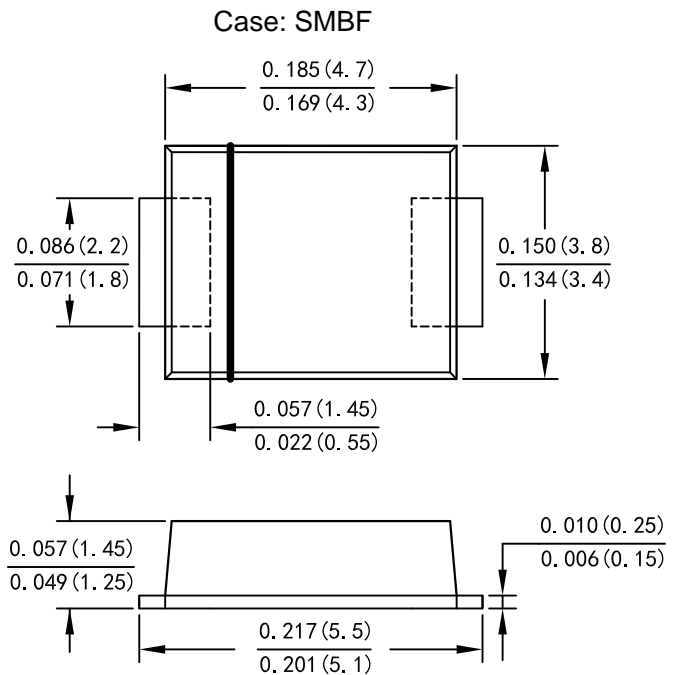
## 2.0AMP Surface Mount Fast Recovery Rectifiers

### Features

- Deally Suited for Automatic Assembly
- Low Power Loss,High Efficiency
- For Use in Low Voltage Application
- 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:Cathode Band or Cathode Notch
- 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	FR2AF	FR2BF	FR2DF	FR2GF	FR2JF	FR2KF	FR2MF	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	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 <sub>L</sub> =100℃	I <sub>F(AV)</sub>	2.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	60							A
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	14.94							A <sup>2</sup> s
Forward Voltage @IF=2.0A	V <sub>FM</sub>	1.3							V
Peak Reverse Current @T <sub>A</sub> =25℃	I <sub>R</sub>	5.0							uA
At Rated DC Blocking Voltage @T <sub>A</sub> =125℃		100							
Maximum Reverse Recovery Time(Note 1)	T <sub>rr</sub>	150				250	500		ns
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	10							pF
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	65							℃/W
Operating Temperature Range	T <sub>J</sub>	-55 to+150							℃
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							℃

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

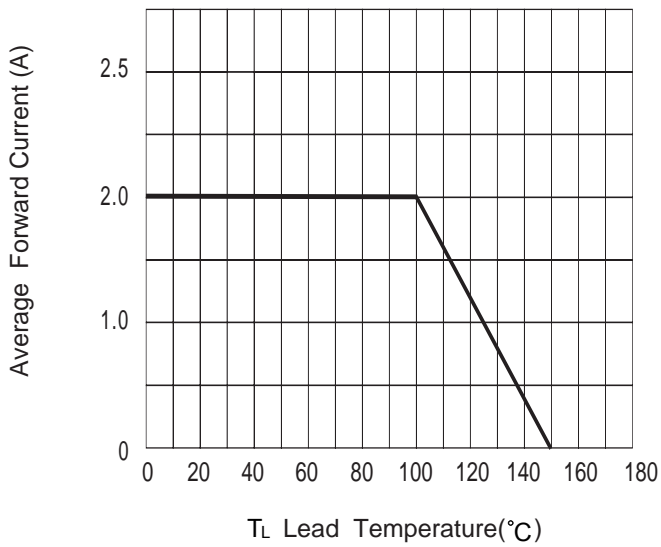


Fig. 2 Typ. Forward Characteristics

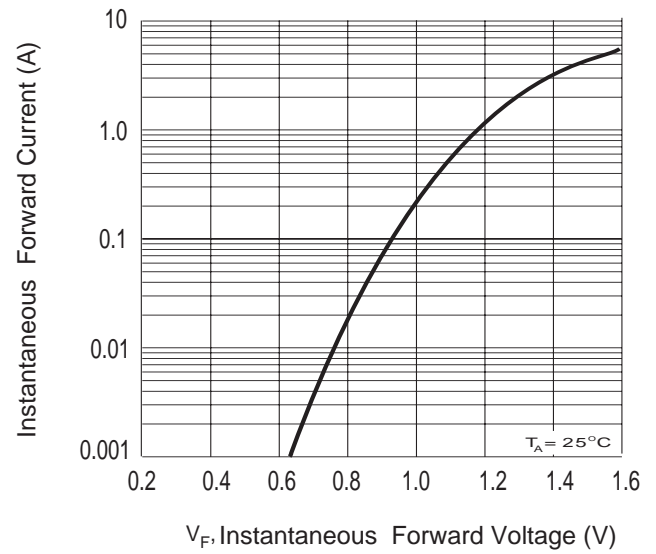


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

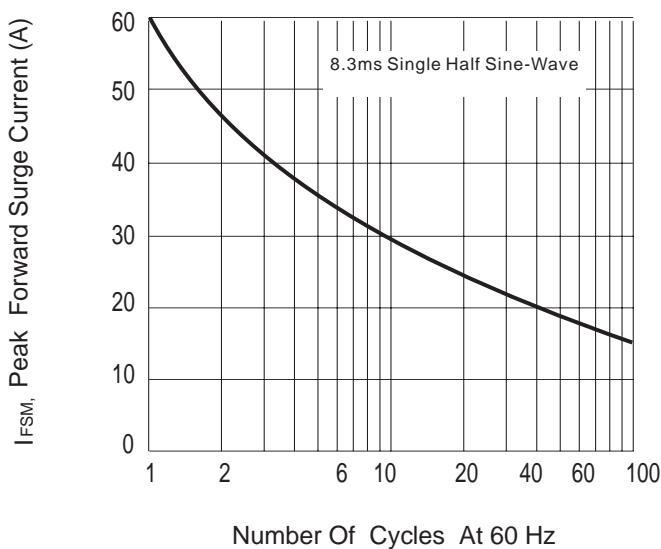


Fig.4 Typical Junction Capacitance

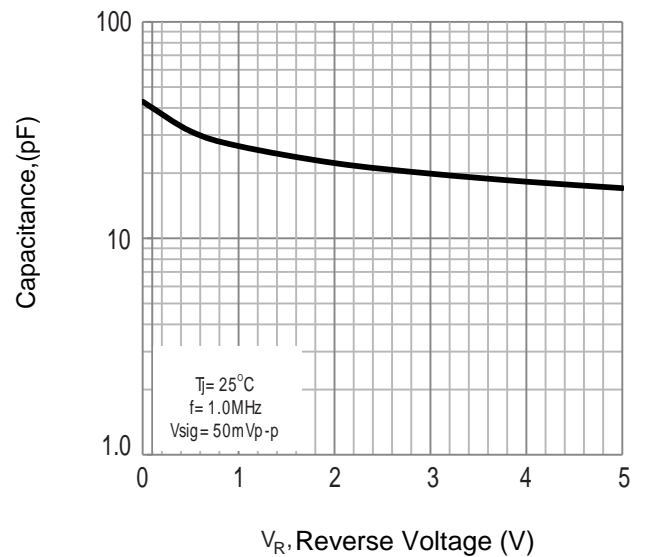


Fig.5 Typical Reverse Characteristics

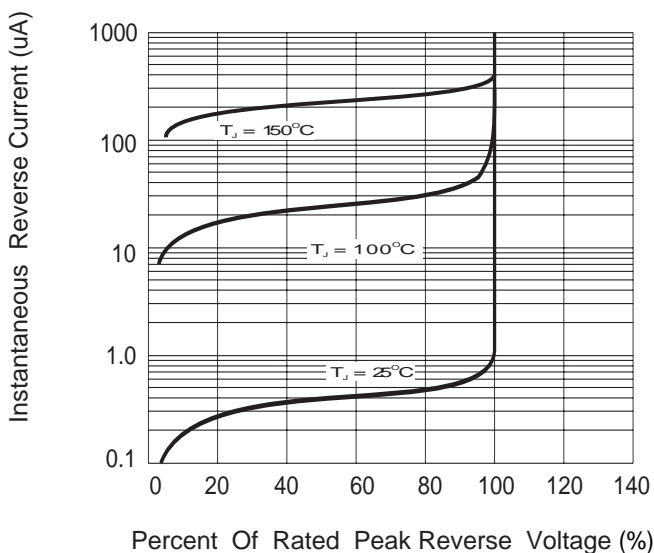
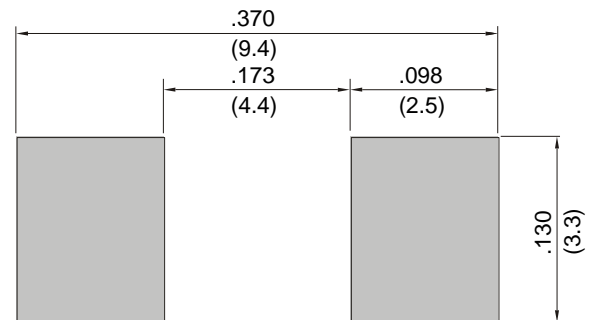


Fig.6 Mounting PAD Layout





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