



# ER2AF THRU ER2JF

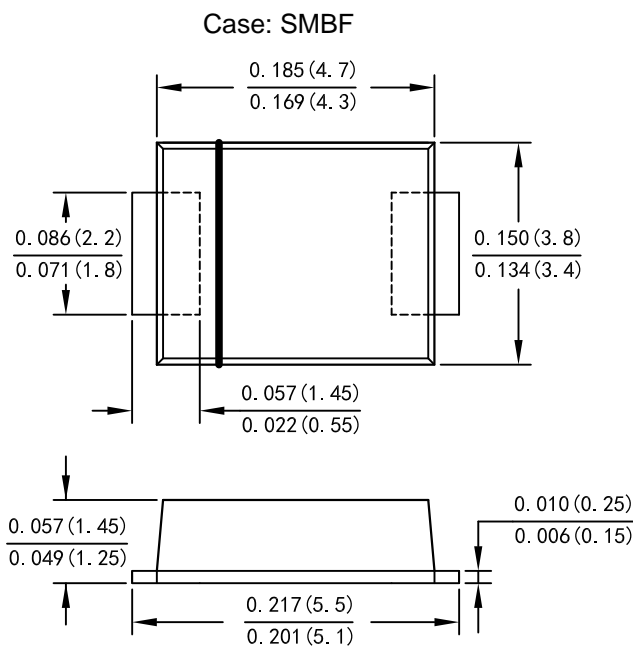
## 2.0AMP Surface Mount Superfast Rectifiers

### Features

- Glass passivated junction chip
- Low Power Loss, High Efficiency
- Ideally Suited for Automatic Assembly
- Guard Ring Die Construction
- 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 denotes cathode end
- Mounting Position: Any
- Marking: 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	ER2AF	ER2BF	ER2CF	ER2DF	ER2EF	ER2GF	ER2JF	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	150	200	300	400	600	V
Average Rectified Output Current @T <sub>L</sub> =100°C	IF(AV)	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>	0.95				1.3		1.7	V
Peak Reverse Current @T <sub>A</sub> =25 °C	I <sub>R</sub>	5.0							uA
At Rated DC Blocking Voltage @T <sub>A</sub> =125 °C		100							
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	35							ns
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	20						10	pF
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	65							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to+150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

Note:

- 1.Reverse Recovery Test Conditions: $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $IRR = 0.25A$ .
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

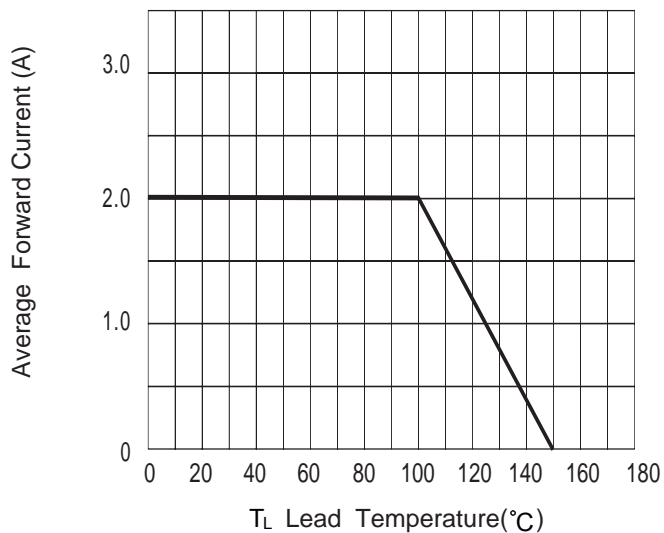


Fig. 2 Typ. Forward Characteristics

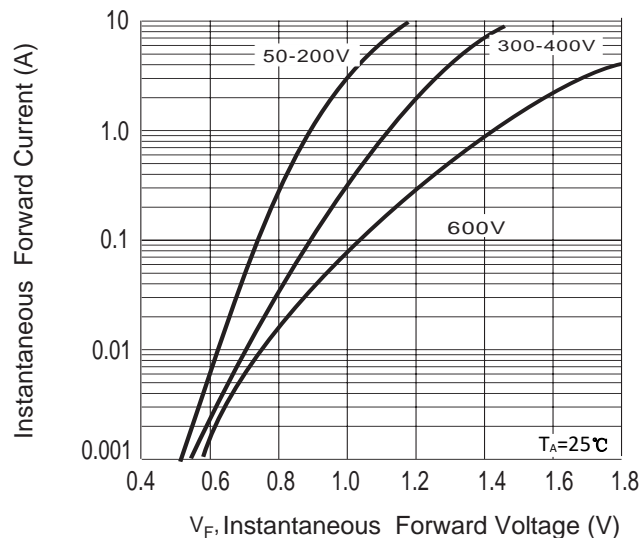


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

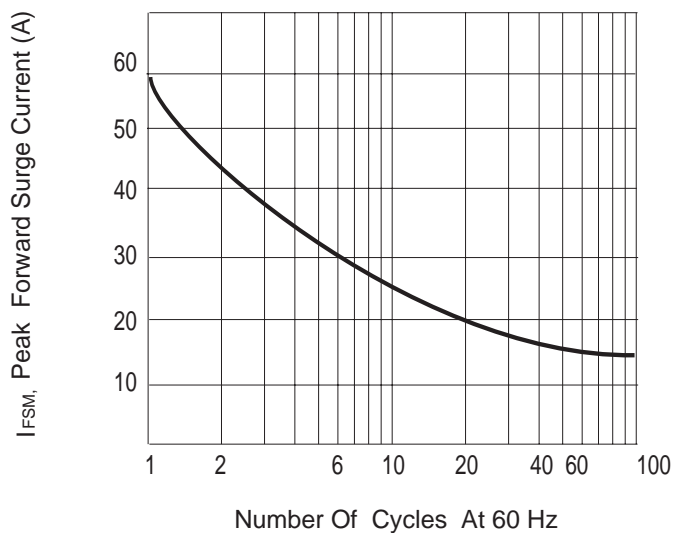


Fig.4 Typical Junction Capacitance

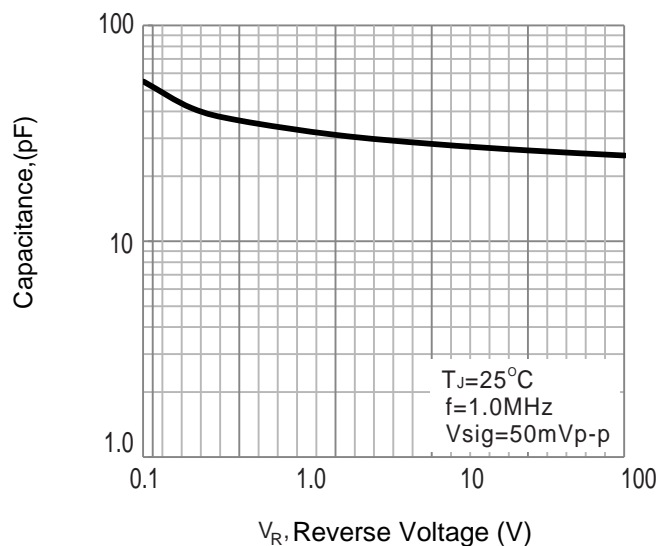


Fig.5 Typical Reverse Characteristics

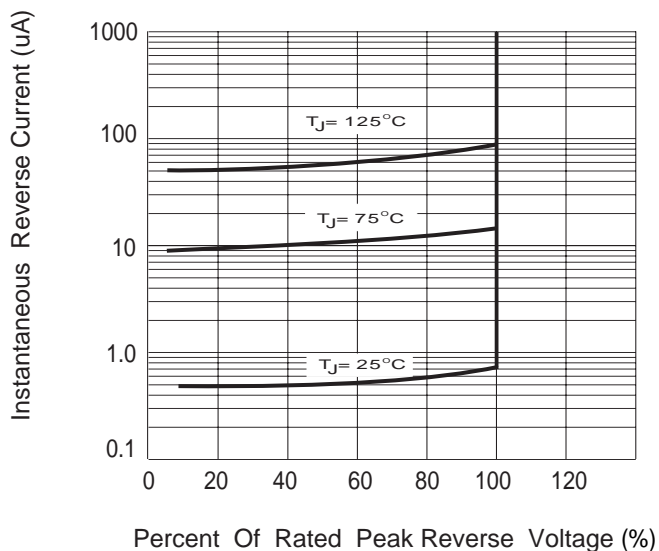
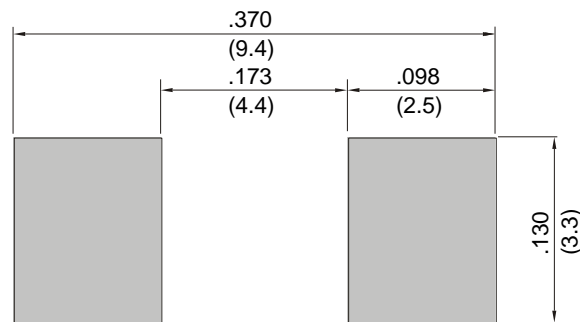


Fig.6 Mounting PAD Layout





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