

### FEATURES

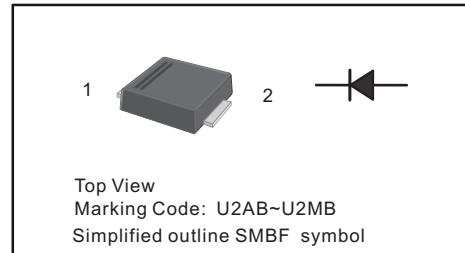
- ◆ For surface mount applications
- ◆ Glass passivated chip junction
- ◆ Low profile package
- ◆ Easy to pick and place
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

### MECHANICAL DATA

- ◆ Case: SMBF molded plastic body
- ◆ Terminals: Solderable per MIL-STD- 750, Method 2026
- ◆ Weight: Approximated 0.057 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derating by 20 %.

PARAMETER	SYMBOL	US2ABF -TN	US2BBF -TN	US2DBF -TN	US2GBF -TN	US2JBF -TN	US2KBF -TN	US2MBF -TN	UNIT
Maximum Repetitive 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
Maximum Average Forward Rectified Current at T <sub>c</sub> =125°C	I <sub>F(AV)</sub>				2				A
Peak Forward Surge Current(Note1)	I <sub>FSM</sub>				50				A
Maximum Forward Voltage at 2.0 A	V <sub>F</sub>		1.0		1.3		1.65		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>A</sub> =25°C T <sub>A</sub> =125°C	I <sub>R</sub>			5		100			uA
Maximum Reverse Recovery Time (Note2)	T <sub>rr</sub>		50			75			nS
Typical Thermal Resistance (Note3)	R <sub>θJA</sub> R <sub>θJC</sub>			60	18				°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>			-55 to +150					°C

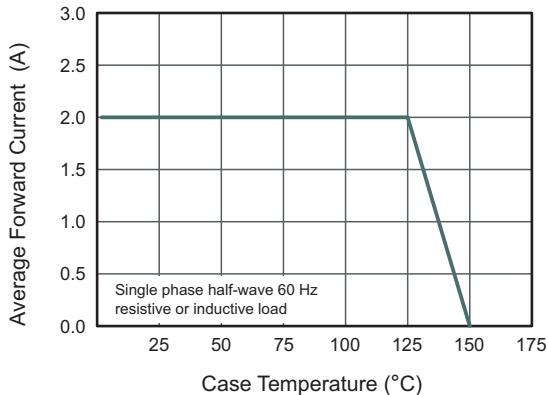
Notes: 1. Measured at 8.3 ms single half sine wave superimposed on rated load (JEDEC Method).

2. Measured at with I<sub>F</sub>=0.5A, I<sub>rr</sub>=0.25A.

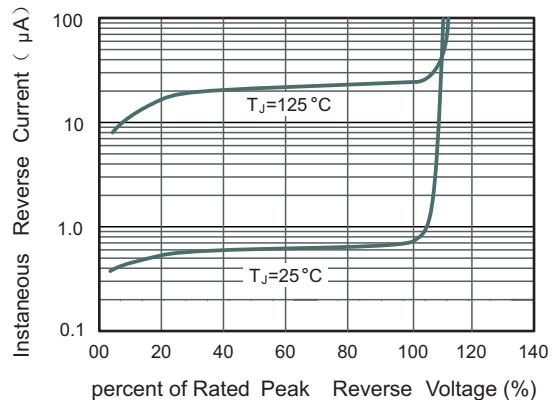
3. P.C.B. mounted with 2.0" X 2.0" (5cm X 5 cm) copper pad areas.

### RATINGS AND CHARACTERISTIC CURVES

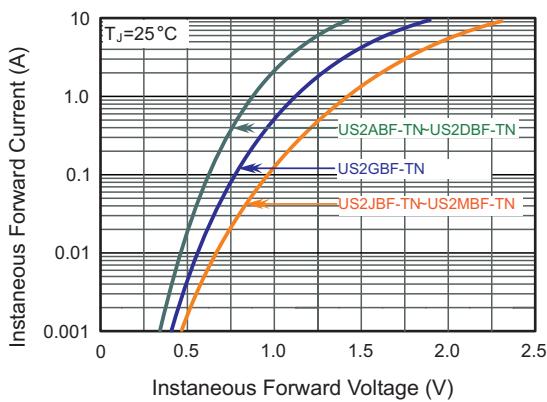
**Fig.1 Forward Current Derating Curve**



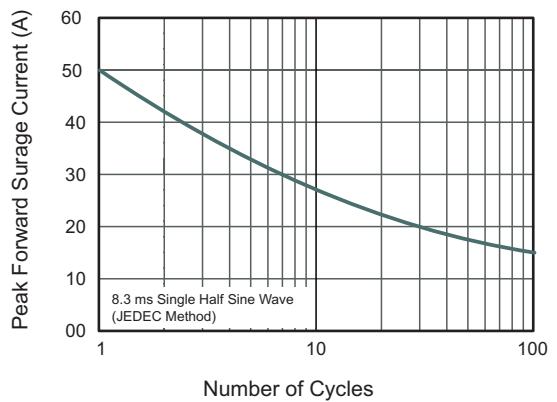
**Fig.2 Typical Reverse Characteristics**



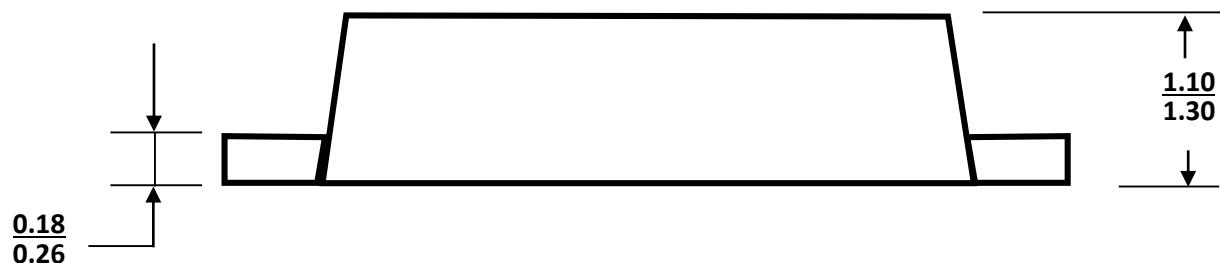
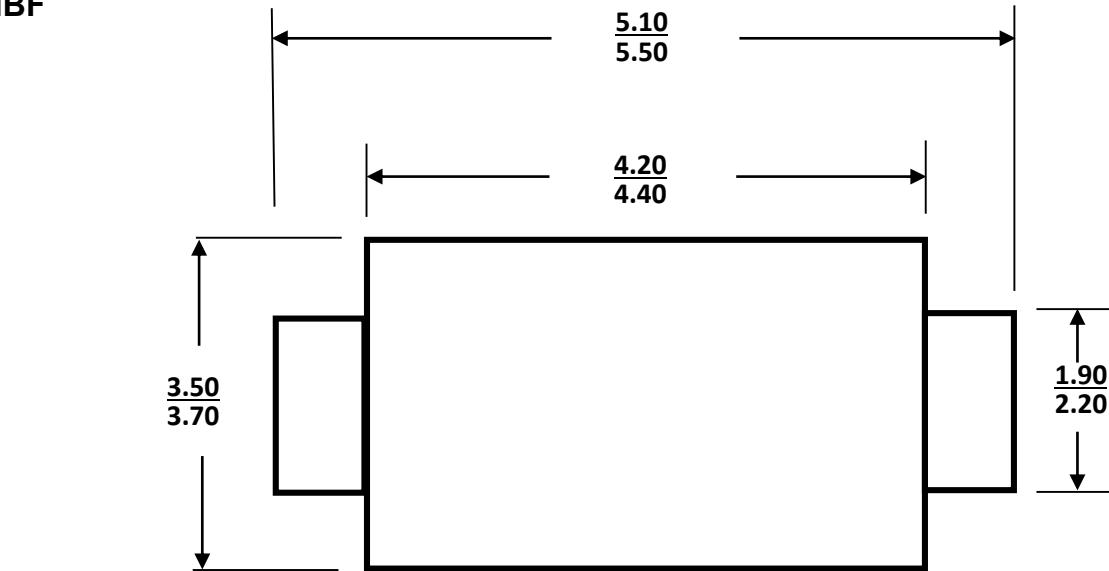
**Fig.3 Typical Forward Characteristics**



**Fig.4 Maximum Non-Repetitive Peak Forward Surge Current**



**SMBF**



**Dimensions in millimeters**

**ORDERING INFORMATION**

Device	Package	Shipping
US2ABF-TN thru US2MBF-TN	SMBF	5,000/ Tape & Reel (13 inches)