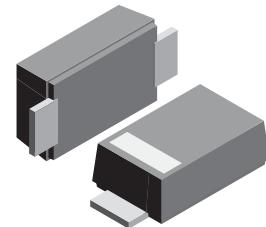
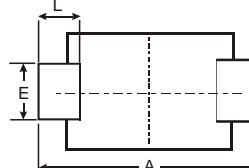
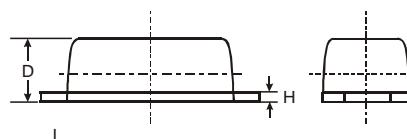
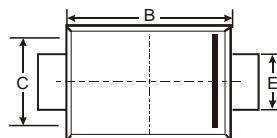


VOLTAGE RANGE: 50 - 1000V
CURRENT: 2.0 A
Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Low Power Loss
- Ultra-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O


Mechanical Data

- Case: SMBF, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.0018 ounces, 0.05grams



SMBF			
Dim	Min	Max	Typ
A	5.45	5.55	5.50
B	4.27	4.33	4.30
C	3.57	3.63	3.60
D	1.32	1.38	1.35
E	1.96	2.00	1.98
H	0.019	0.021	0.20
L	0.73	0.77	0.75

All Dimensions in mm

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	US2AF	US2BF	US2DF	US2GF	US2JF	US2KF	US2MF	Unit
Peak Repetitive Reverse Voltage	V _{RRM}								
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_L = 55^\circ\text{C}$	I _o				2.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}				50				A
Forward Voltage @ $I_F = 2.0\text{A}$	V _{FM}		1.0		1.4		1.7		V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I _{RM}				10				μA
					50				
Reverse Recovery Time (Note 1)	t _{rr}		50			75			nS
Typical Junction Capacitance (Note 2)	C _j			20					pF
Typical Thermal Resistance (Note 3)	R _{θJL}			50					$^\circ\text{C/W}$
Operating and Storage Temperature Range	T _j , T _{STG}			-50 to +150					$^\circ\text{C}$

Note: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_r = 0.25\text{A}$. See figure 5.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.

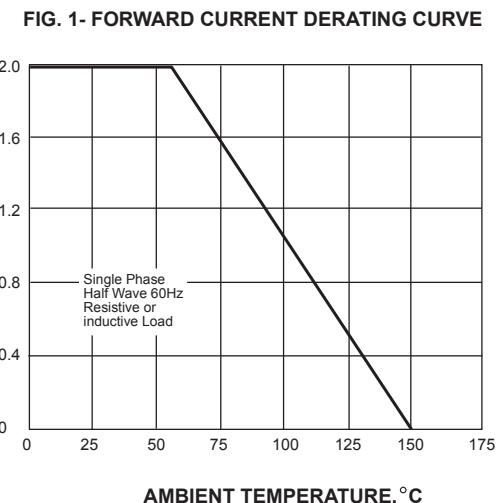
3. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas



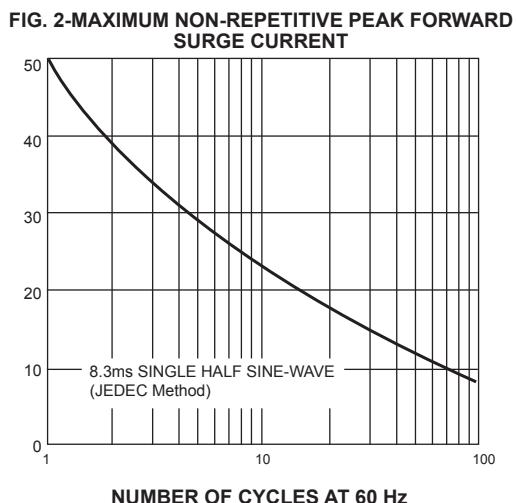
SUNMATE

RATINGS AND CHARACTERISTIC CURVES US2AF THRU US2MF

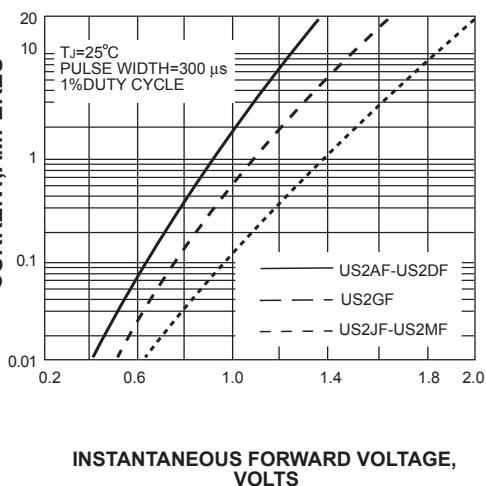
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



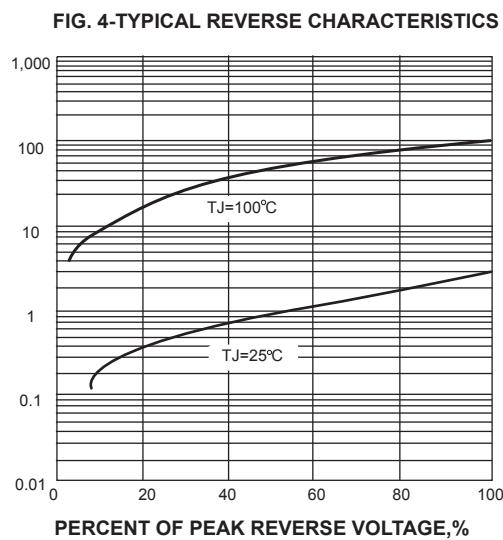
PEAK FORWARD SURGE CURRENT, AMPERES



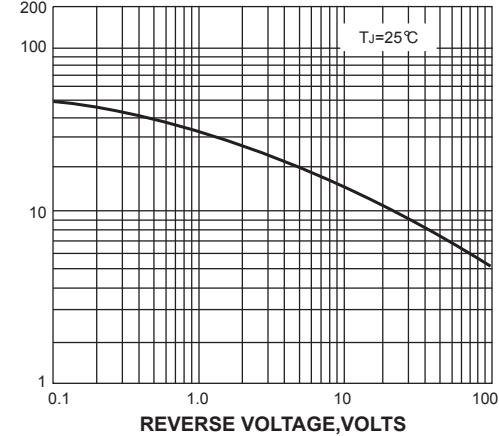
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MICROAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

