

**SINGLE-PHASE BRIDGE RECTIFIER**  
**VOLTAGE RANGE 200 to 1000 Volts**  
**CURRENT 1.0 Ampere**

### FEATURES

- \* Glass Passivated chip junction
- \* High forward surge current capability
- \* Ideal for printed circuit board
- \* High temperature soldering guaranteed:  
260°C/10 second at 5 lbs. (2.3kg) tension

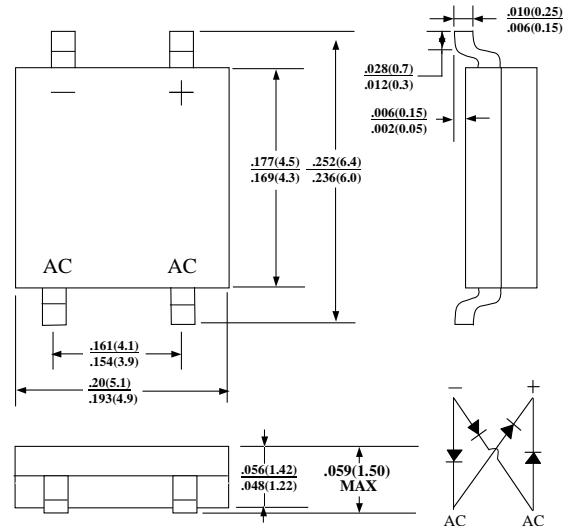
### MECHANICAL DATA

- \* Case: Transfer molded plastic
- \* Epoxy: UL94V-O rate flame retardant
- \* Terminals : Lead Solderable Per MIL-STD-202 method 208
- \* Polarity : As Marking on Body
- \* Mounting Position: Any
- \* Weight : 0.04 ounce, 1.0 gram



\* In compliance with EU RoHs 2002/95/EC directives

ABS



Dimensions in inches and (millimeters)

### 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 %

Characteristic	Symbol	ABS2	ABS4	ABS6	ABS8	ABS10	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	280	420	560	700	V
Average Rectifier Forward Current (Note 1) @ $T_A=50^\circ\text{C}$	$I_{O(AV)}$	1.0					A
Non-Repetitive Peak Surge Current 8.3 ms Single half sine-wave superimposed on rated load ( JEDEC Method)	$I_{FSM}$	30					A
Forward Voltage (per element) ( $I_F = 1.0$ Amp)	$V_{FM}$	0.95					V
Peak Reverse Current ( Rated DC Voltage, $T_C = 25^\circ\text{C}$ ) ( Rated DC Voltage, $T_C = 125^\circ\text{C}$ )	$I_R$	0.5 20.0					mA
Rating for Fusing( $t < 8.3$ ms)	$I^2t$	10					$\text{A}^2\text{s}$
Typical Junction Capacitance per element (Note2)	$C_J$	25					pF
Typical Thermal Resistance (note 3)	$R_{\theta JL}$ $R_{\theta JA}$	28.0 88.0					$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_J, T_{stg}$	-65 to +150					$^\circ\text{C}$

- Note: 1 Lead maintained at ambient temperature at a distance of 9.5 mm from the case.  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
 3. Mounted on P.C. Board with 5.0mm<sup>2</sup> (.013mm thick) copper pad areas.

# ABS2 thru ABS10

FIG-1 FORWARD CURRENT DERATING CURVE

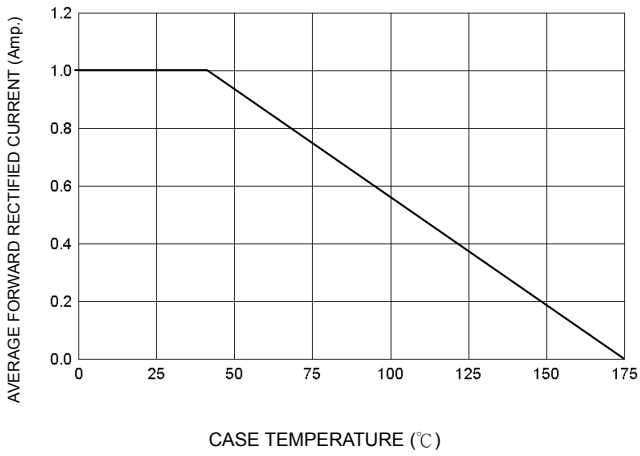


FIG-2 TYPICAL FORWARD CHARACTERISTICS

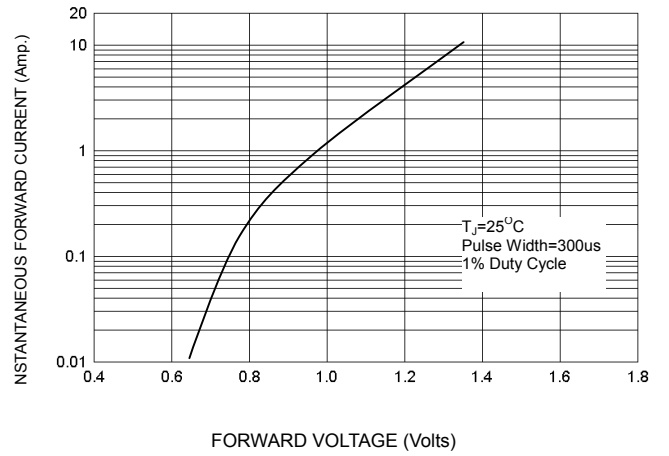


FIG-3 PEAK FORWARD SURGE CURRENT

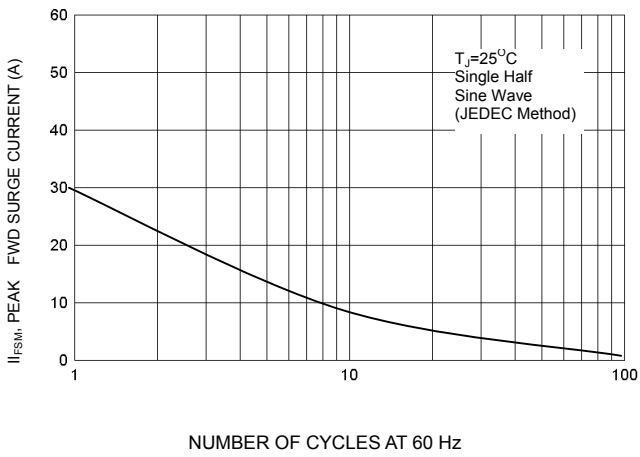


FIG-4 TYPICAL JUNCTION CAPACITANCE

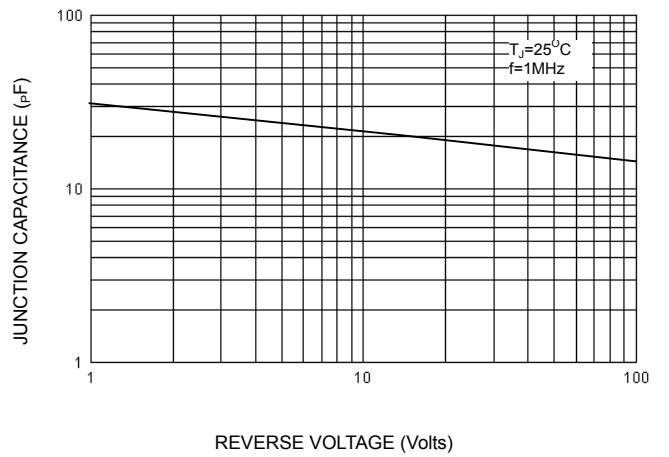


FIG-5 TYPICAL REVERSE CHARACTERISTICS

