



# W005 THRU W10

## SINGLE PHASE SILICON BRIDGE RECTIFIER

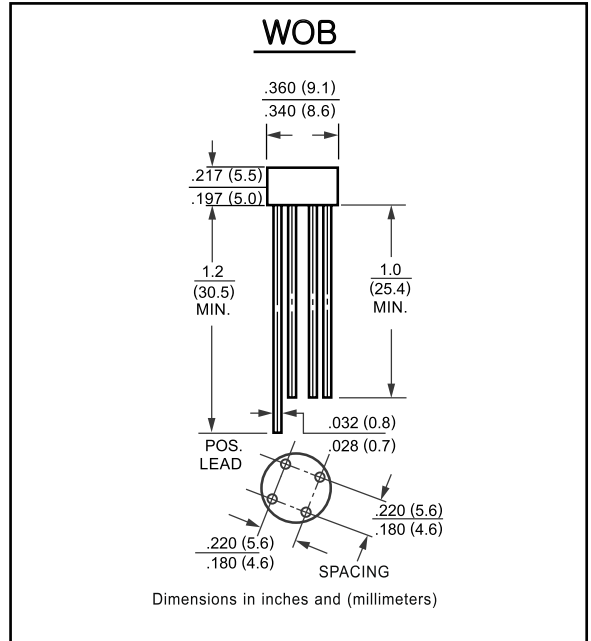
Reverse Voltage - 50 to 1000 Volts    Forward Current - 1.5 Ampere

### FEATURES

- Ideal for printed circuit board
- Surge overload rating: 50A peak
- High case dielectric strength

### MECHANICAL DATA

- Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
- Terminals: Plated leads solderable per MIL-STD 202E, method 208C
- Mounting Position: Any
- Weight: 1.10 g
- Marking: Type Number



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

CHARACTERISTICS	SYMBOL	W005	W01	W02	W04	W06	W08	W10	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input 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 Output Current at T <sub>A</sub> = 25°C	I <sub>O</sub>	1.5							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50							A
Maximum DC Forward Voltage Drop per Bridge Element at 1.5A DC	V <sub>F</sub>	1.0							V
Maximum Reverse Current at rated DC Blocking Voltage per element	I <sub>R</sub>	@T <sub>A</sub> = 25°C							uA
		@T <sub>A</sub> = 125°C							
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	10							A <sup>2</sup> Sec
Typical Junction Capacitance ( Note1)	C <sub>J</sub>	24							pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	36							°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150							°C

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts

2. Thermal Resistance from Junction to Ambient and from junction to lead mounted on P.C.B. with 0.5 x 0.5" (13x13mm) copper pads.



# W005 THRU W10

## RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

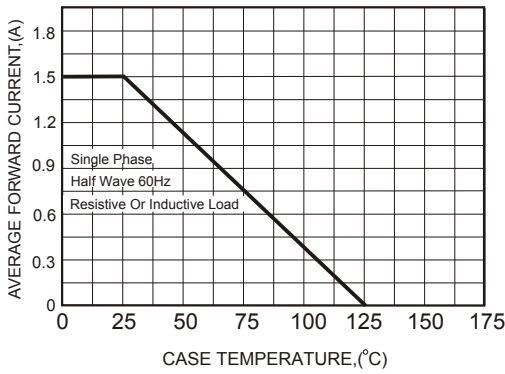


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

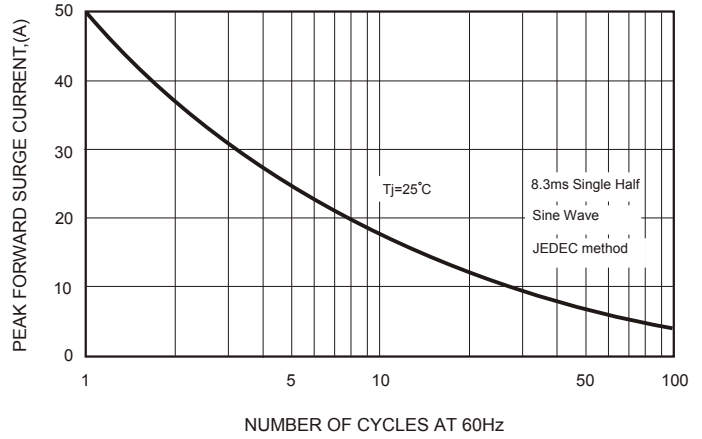


FIG.3-TYPICAL FORWARD CHARACTERISTICS

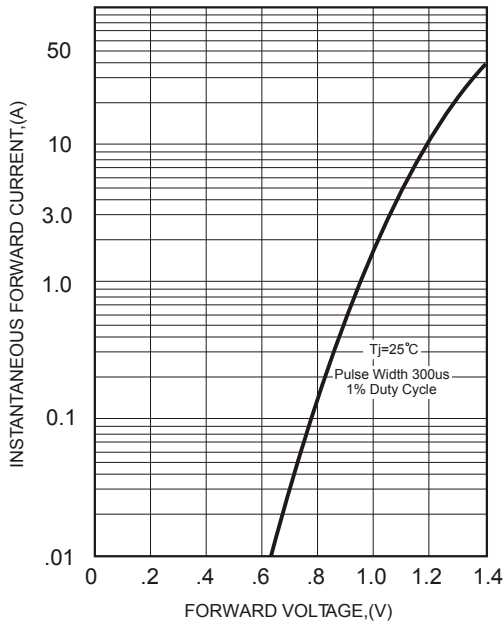


FIG.4-TYPICAL REVERSE CHARACTERISTICS

