

# W005G - W10G

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## Features

- Surge overload rating: 50 amperes peak.
- Glass passivated junction.
- Ideal for printed circuit board.
- Reliable low cost construction technique results in inexpensive product.
- UL certified, UL #E96005.



## 1.5 Ampere Glass Passivated Bridge Rectifiers

### Absolute Maximum Ratings\*

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Value	Units
$I_{F(AV)}$	Average Rectified Current @ $T_A = 50^\circ\text{C}$	1.5	A
$I_{FSM}$	Non-repetitive Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	50	A
$P_D$	Total Device Dissipation Derate above $25^\circ\text{C}$	3.47 28	W mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient,** per leg	36	$^\circ\text{C}/\text{W}$
$R_{\theta JL}$	Thermal Resistance, Junction to Lead,** per leg	11	$^\circ\text{C}/\text{W}$
$T_{stg}$	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	-55 to +150	$^\circ\text{C}$

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

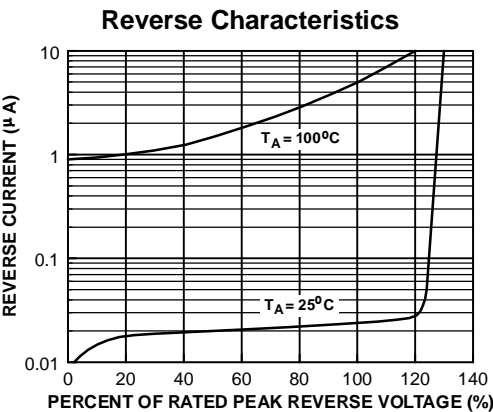
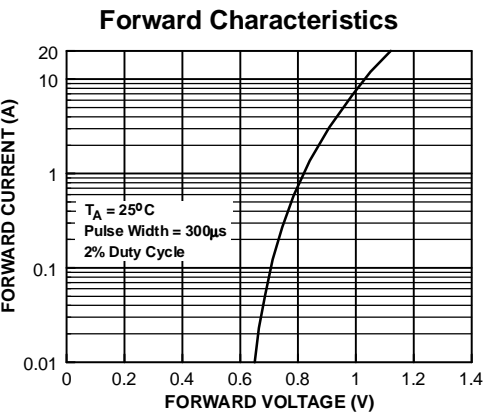
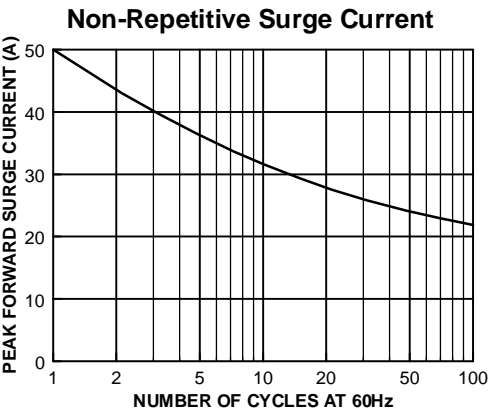
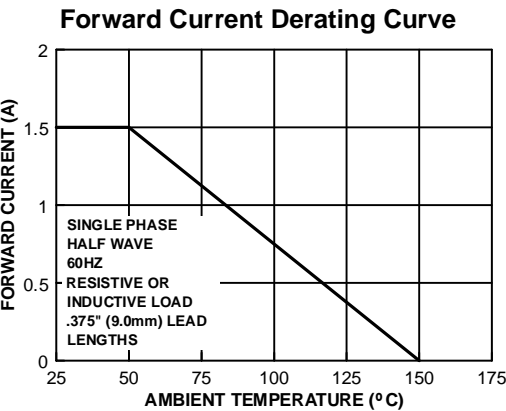
\*\*Device mounted on PCB with 0.375" (9.5 mm) lead length.

### Electrical Characteristics

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Device							Units
		005G	01G	02G	04G	06G	08G	10G	
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V <sub>RMS</sub>	Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
V <sub>R</sub>	DC Reverse Voltage (Rated V <sub>R</sub> )	50	100	200	400	600	800	1000	V
I <sub>RM</sub>	Maximum Instantaneous Reverse Leakage, total bridge @ rated V <sub>R</sub> T <sub>A</sub> = 25°C T <sub>A</sub> = 125°C	5.0 500							μA μA
V <sub>FM</sub>	Maximum Instantaneous Forward Voltage Drop, per bridge @ 1.0 A	1.0							V
	I <sup>2</sup> t rating for fusing t < 8.3 ms	10							A <sup>2</sup> s
C	Typical Junction Capacitance, per leg V <sub>R</sub> = 4.0 V, f = 1.0 MHz	15							pF

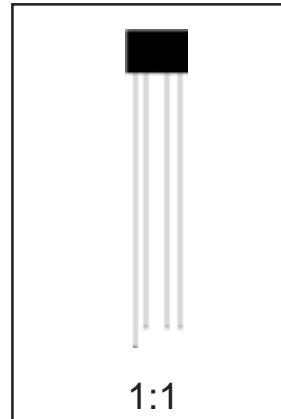
Typical Characteristics



## WOB Package Dimensions



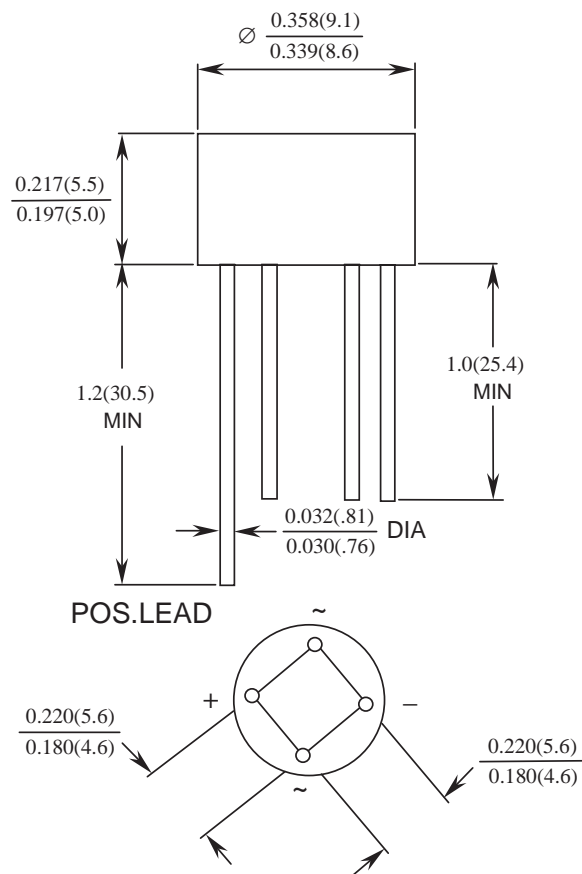
### WOB (FS PKG Code R5)



Scale 1:1 on letter size paper

Dimensions shown below are in:  
inches [millimeters]

Part Weight per unit (gram): 1.1



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