

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## W005G - W10G

### **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<sub>A</sub> = 25°C unless otherwise noted

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

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

### **Electrical Characteristics** T<sub>A</sub> = 25°C unless otherwise noted

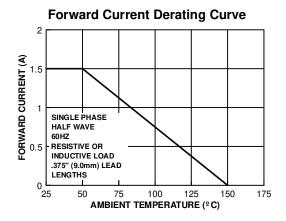
Symbol	Parameter	Device		Units					
		005G	01G	02G	04G	06G	08G	10G	
$V_{RRM}$	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V <sub>RMS</sub>	Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
V <sub>R</sub>	DC Reverse Voltage (Rated V <sub>R</sub> )	50	100	200	400	600	800	1000	V
I <sub>RM</sub>	Maximum Instantaneous Reverse Leakage, total bridge @ rated $V_R$ $T_A = 25$ °C $T_A = 125$ °C	5.0 500		μ <b>Α</b> μ <b>Α</b>					
V <sub>FM</sub>	Maximum Instantaneous Forward Voltage Drop, per bridge @ 1.0 A  1 <sup>2</sup> t rating for fusing t < 8.3 ms	1.0		V A <sup>2</sup> s					
С	Typical Junction Capacitance, per leg V <sub>R</sub> = 4.0 V, f = 1.0 MHz	15		pF					

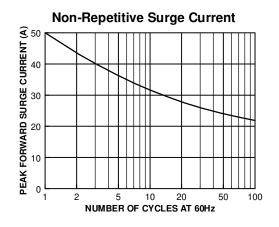
<sup>\*\*</sup>Device mounted on PCB with 0.375" (9.5 mm) lead length.

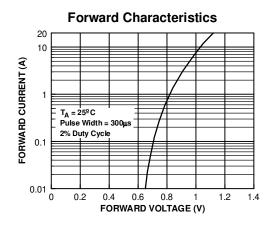
### **Glass Passivated Bridge Rectifiers**

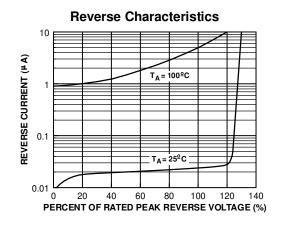
(continued)

### **Typical Characteristics**







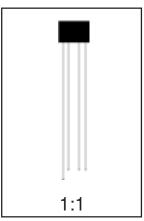


### **WOB Package Dimensions**



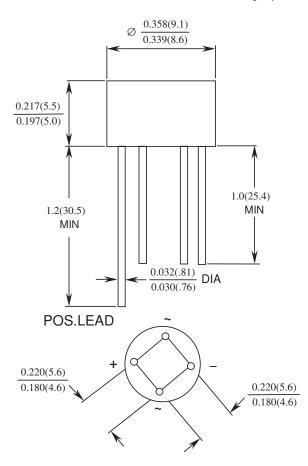
# WOB (FS PKG Code R5)





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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DOME™ ISOPLANAR™ Quiet Series™

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#### **Definition of Terms**

Datasheet Identification	Product Status	Definition
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Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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