

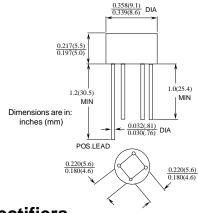
# Discrete POWER & Signal Technologies

## 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.





# 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>O</sub>	Average Rectified Current @ T <sub>A</sub> = 50°C	1.5	А	
İf(surge)	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 Derate above 25°C	3.47 28	W 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> = 2

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

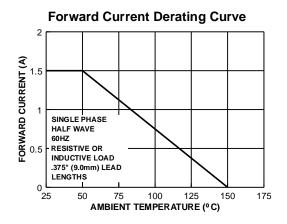
Parame	Device						Units		
		005G	01G	02G	04G	06G	08G	10G	
Peak Repetitive Reverse Voltage		50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage		35	70	140	280	420	560	700	V
DC Reverse Voltage	(Rated V <sub>R</sub> )	50	100	200	400	600	800	1000	V
Maximum Reverse Lea			l			L	l		
total bridge @ rated $V_R$ $T_A = 25$ °C		5.0						μΑ	
	T <sub>A</sub> = 125°C				500				μΑ
Maximum Forward Voltage Drop,									
per bridge @ 1.0 A		1.0							V
I <sup>2</sup> t rating for fusing	10						A <sup>2</sup> Sec		
Typical Junction Capacitance, per leg $V_R = 4.0 \text{ V}$ , f = 1.0 MHz					15				pF

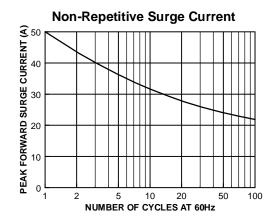
<sup>\*\*</sup>Device mounted on PCB with 0.375" (9.5 mm) lead length.

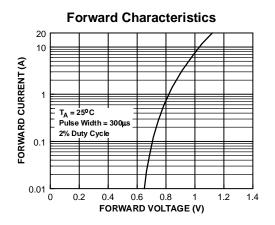
### **Glass Passivated Bridge Rectifiers**

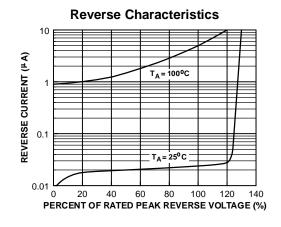
(continued)

### **Typical Characteristics**









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FACT Quiet Series  $^{\text{TM}}$  Quiet Series  $^{\text{TM}}$  SuperSOT  $^{\text{TM}}$ -3 SuperSOT  $^{\text{TM}}$ -6 GTO  $^{\text{TM}}$  SuperSOT  $^{\text{TM}}$ -8 HiSeC  $^{\text{TM}}$  TinyLogic  $^{\text{TM}}$ 

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