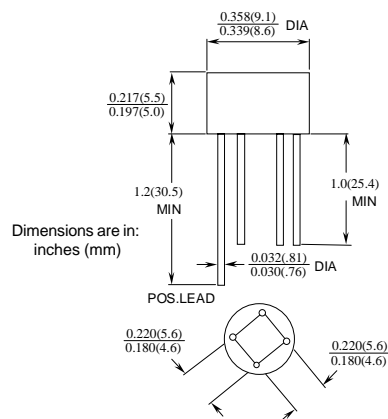
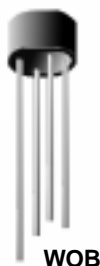


# W005G - W10G

## 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\*

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

Symbol	Parameter	Value	Units
$I_O$	Average Rectified Current @ $T_A = 50^\circ\text{C}$	1.5	A
$I_{f(\text{surge})}$	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	$^\circ\text{C}/\text{W}$
$T_{\text{stg}}$	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.

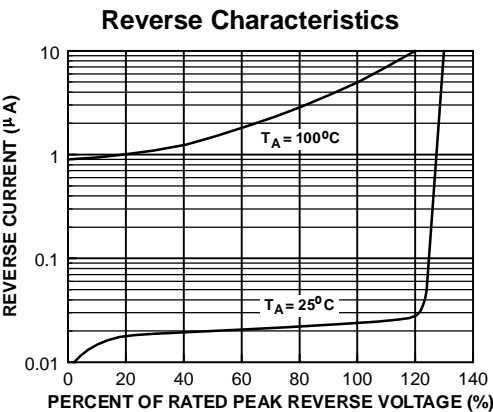
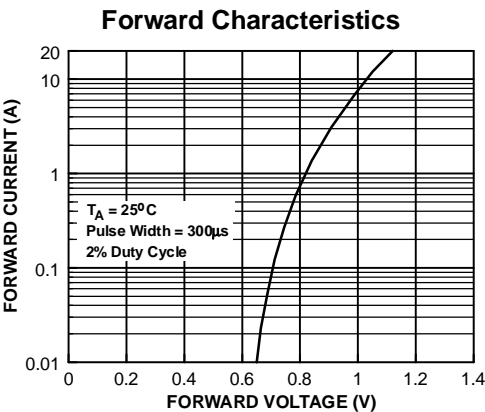
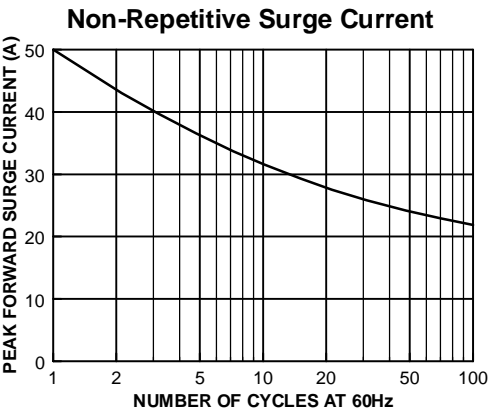
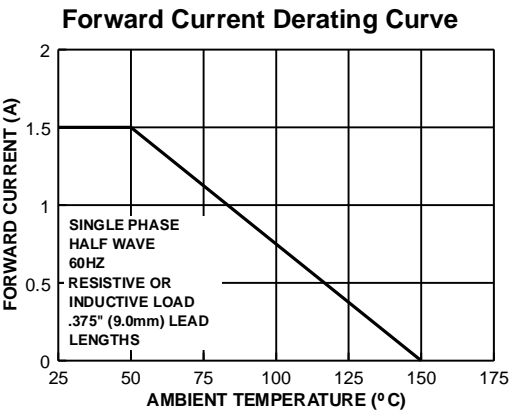
\*\*Device mounted on PCB with 0.375" (9.5 mm) lead length.

### Electrical Characteristics

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

Parameter	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 $V_R$ )	50	100	200	400	600	800	1000	V
Maximum Reverse Leakage, total bridge @ rated $V_R$ $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	5.0 500							$\mu\text{A}$ $\mu\text{A}$
Maximum Forward Voltage Drop, per bridge @ 1.0 A	1.0							V
$I^2t$ rating for fusing $t < 8.3$ ms	10							$\text{A}^2\text{Sec}$
Typical Junction Capacitance, per leg $V_R = 4.0$ V, $f = 1.0$ MHz	15							pF

Typical Characteristics



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FACT Quiet Series™	Quiet Series™
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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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