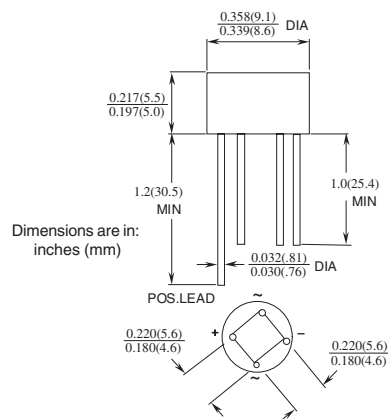


W005G - W10G

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°C	3.47 28	W mW/ $^\circ\text{C}$
R_{JA}	Thermal Resistance, Junction to Ambient,** per leg	36	$^\circ\text{C}/\text{W}$
R_{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

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 $T_A = 25^\circ\text{C}$	5.0							A
$T_A = 125^\circ\text{C}$	500							A
Maximum Forward Voltage Drop, per bridge @ 1.0 A	1.0							V
I^2t rating for fusing $t < 8.3$ ms	10							A^2Sec
Typical Junction Capacitance, per leg $V_R = 4.0$ V, $f = 1.0$ MHz	15							pF

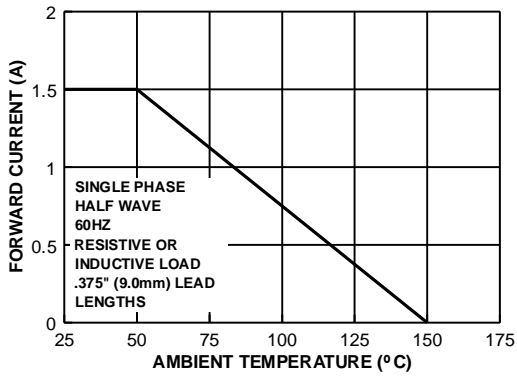
Glass Passivated Bridge Rectifiers

(continued)

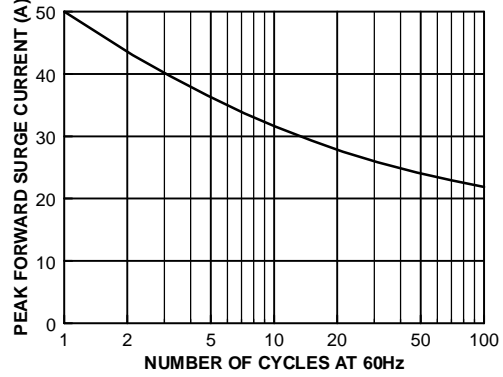
W005G - W10G

Typical Characteristics

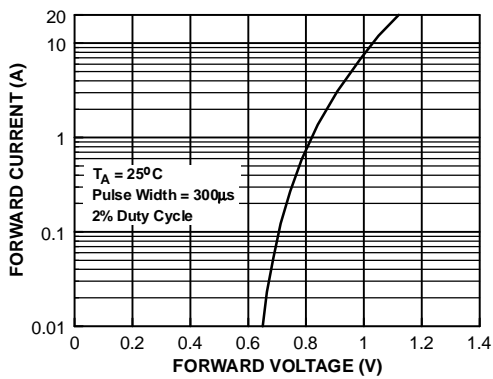
Forward Current Derating Curve



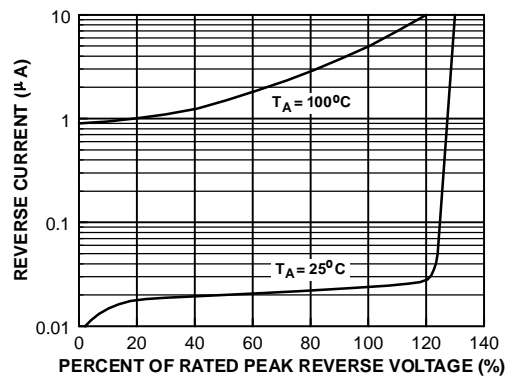
Non-Repetitive Surge Current



Forward Characteristics



Reverse Characteristics



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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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