

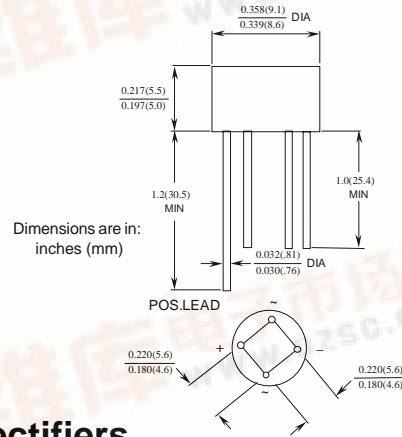


Discrete POWER & Signal Technologies

2W005G - 2W10G

Features

- Glass passivated junction.
- Ideal for printed circuit board.
- Reliable low cost construction technique results in inexpensive product.
- High surge current capability.



2.0 Ampere Glass Passivated Bridge Rectifiers

Absolute Maximum Ratings* T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
I _o	Average Rectified Current @ T _A = 50°C	2.0	A
I _{f(surge)}	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	60	A
P _D	Total Device Dissipation Derate above 25°C	3.13 25	W mW/°C
R _{θJA}	Thermal Resistance, Junction to Ambient,** per leg	40	°C/W
R _{θJL}	Thermal Resistance, Junction to Lead,** per leg	15	°C/W
T _{stg}	Storage Temperature Range	-55 to +150	°C
T _J	Operating Junction Temperature	-55 to +150	°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°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 Current, per leg @ rated V _R									
<small>T_A = 25°C</small>								5.0	μA
<small>T_A = 125°C</small>								500	μA
Maximum Forward Voltage Drop, per bridge @ 2.0 A								1.1	V
I ² t rating for fusing t < 8.3 ms								10	A ² Sec
Typical Junction Capacitance, per leg V _R = 4.0 V, f = 1.0 MHz								19	pF



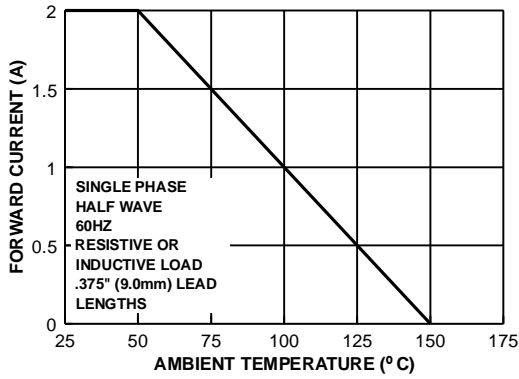
Glass Passivated Bridge Rectifiers

(continued)

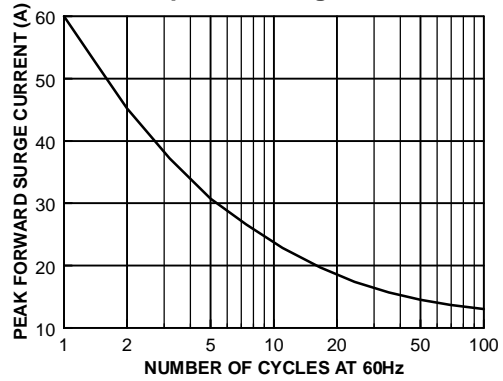
2W005G - 2W10G

Typical Characteristics

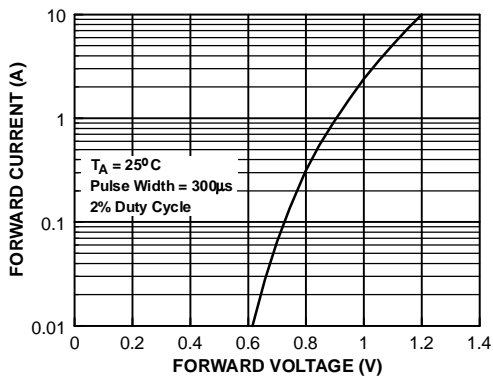
Forward Current Derating Curve



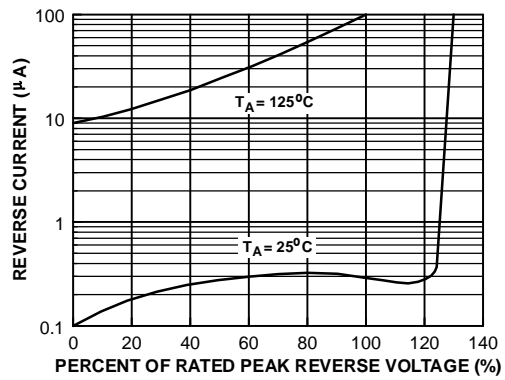
Non-Repetitive Surge Current



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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