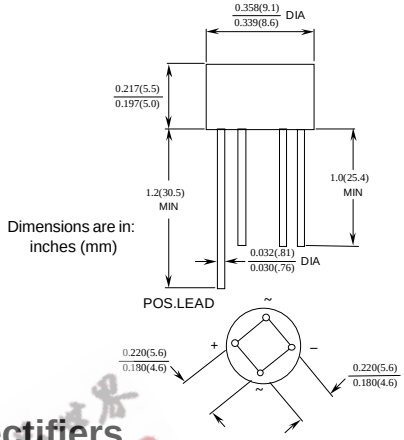
FAIRCHILD SEMICONDUCTOR TM

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
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient,** per leg	40	°C/W
$R_{\theta JL}$	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.

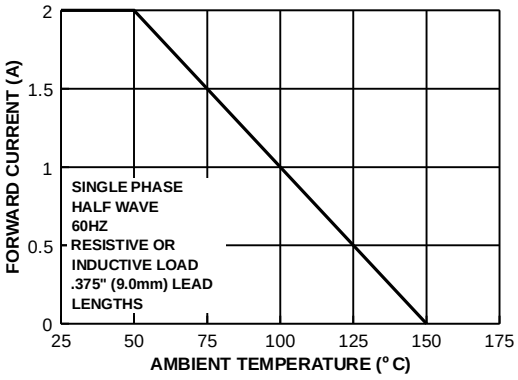
Electrical Characteristics

T_A = 25°C unless otherwise noted

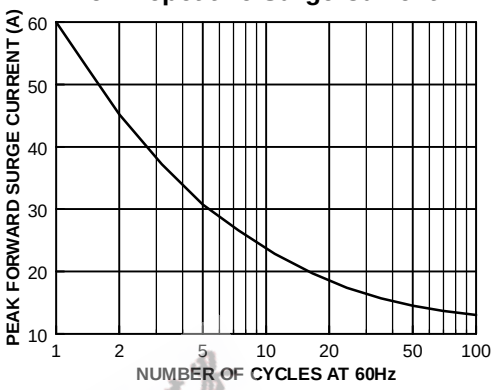
Parameter	Device							Units
	005G	01G	02G	04G	06G	08G	10G	
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
DC Reverse Voltage (Rated V_R)	50	100	200	400	600	800	1000	V
Maximum Reverse Leakage Current, per leg @ rated V_R T_A = 25°C T_A = 125°C	5.0 500							µA µA
Maximum Forward Voltage Drop, per bridge @ 2.0 A	1.1							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	19							pF

Typical Characteristics

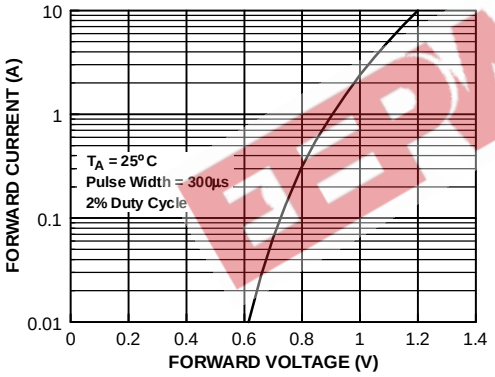
Forward Current Derating Curve



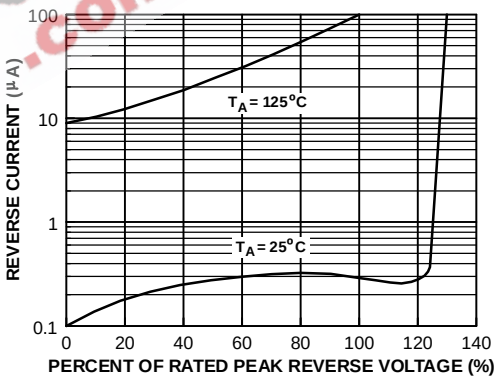
Non-Repetitive Surge Current



Forward Characteristics



Reverse Characteristics



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