

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.
- UL certified, UL #E96005.



1.5 Ampere Glass Passivated Bridge Rectifiers

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

Symbol	Parameter	Value	Units
I _{F(AV)}	Average Rectified Current @ T _A = 50°C	1.5	A
I _{FSM}	Non-repetitive 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/°C
R _{θJA}	Thermal Resistance, Junction to Ambient,** per leg	36	°C/W
R _{θJL}	Thermal Resistance, Junction to Lead,** per leg	11	°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.

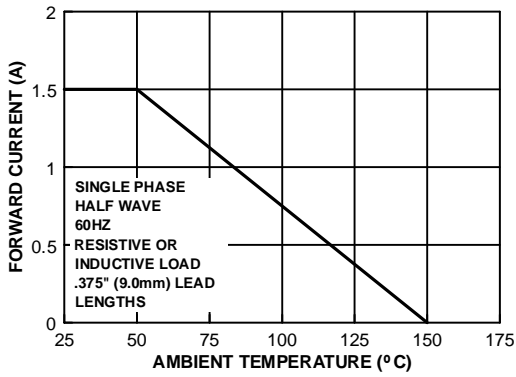
**Device mounted on PCB with 0.375" (9.5 mm) lead length.

Electrical Characteristics T_A = 25°C unless otherwise noted

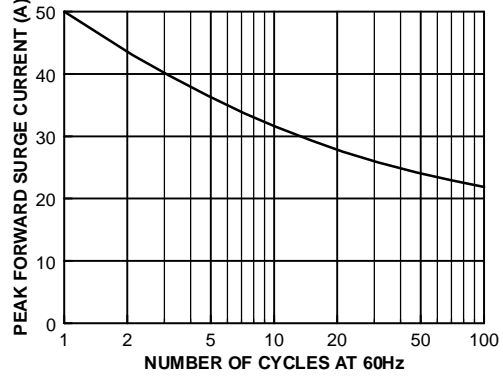
Symbol	Parameter	Device							Units
		005G	01G	02G	04G	06G	08G	10G	
V _{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V _{RMS}	Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
V _R	DC Reverse Voltage (Rated V _R)	50	100	200	400	600	800	1000	V
I _{RM}	Maximum Instantaneous Reverse Leakage, total bridge @ rated V _R T _A = 25°C T _A = 125°C	5.0 500							μA μA
V _{FM}	Maximum Instantaneous Forward Voltage Drop, per bridge @ 1.0 A	1.0							V
	I ² t rating for fusing t < 8.3 ms	10							A ² s
C	Typical Junction Capacitance, per leg V _R = 4.0 V, f = 1.0 MHz	15							pF

Typical Characteristics

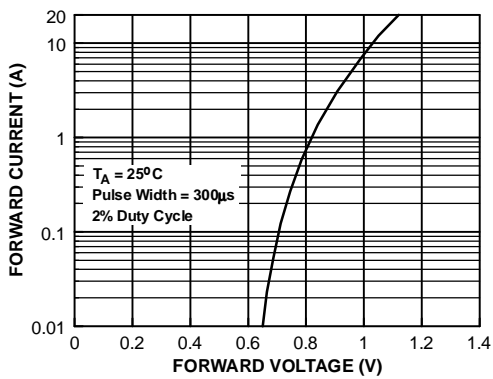
Forward Current Derating Curve



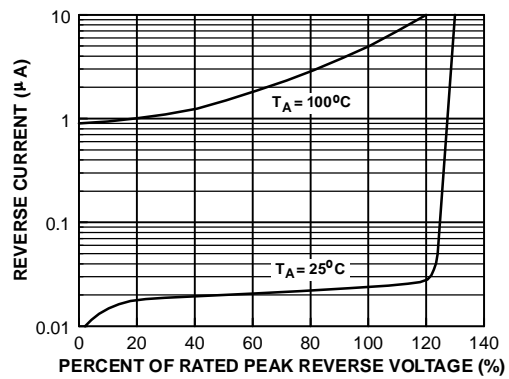
Non-Repetitive Surge Current



Forward Characteristics



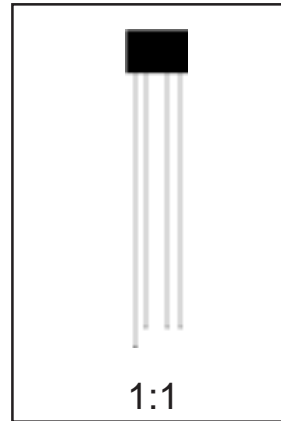
Reverse Characteristics



WOB Package Dimensions



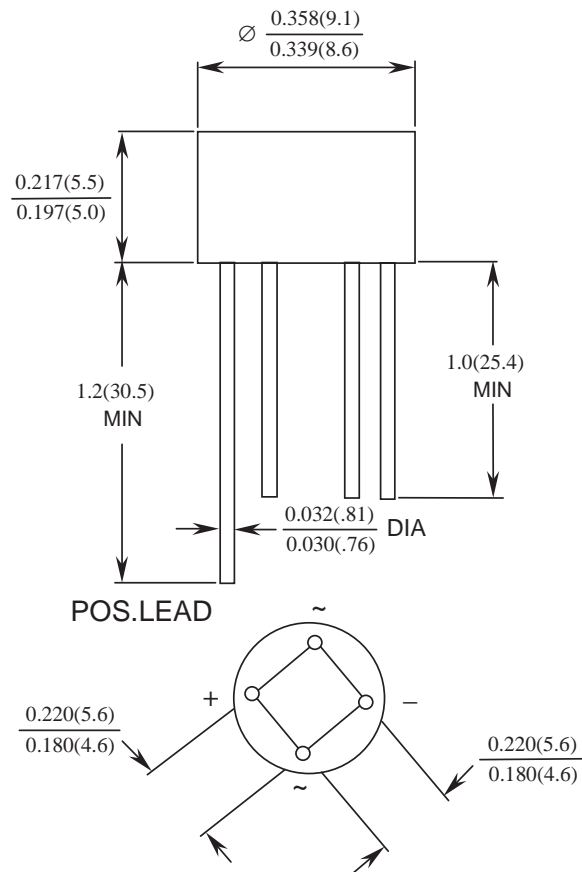
WOB (FS PKG Code R5)



Scale 1:1 on letter size paper

Dimensions shown below are in:
inches [millimeters]

Part Weight per unit (gram): 1.1



September 1999, Rev. A

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Rev. G