



## Glass Passivated Single-Phase Bridge Rectifier

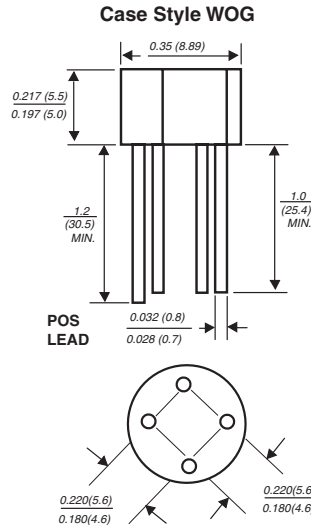
Rectifier Reverse Voltage 50 and 1000 V  
Rectifier Forward Current 2.0 A

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under the Recognized Component Index
- Glass passivated chip junction
- High case dielectric strength
- Typical  $I_R$  less than  $0.5 \mu A$
- High surge current capability
- Ideal for printed circuit boards
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375 (9.5mm) lead length, 5lbs. (2.3kg) tension

### Mechanical Data

**Case:** Molded plastic body over passivated junctions  
**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026  
**Mounting Position:** Any  
**Weight:** 0.04 oz., 1.1 g



Dimensions in inches and (millimeters)

### Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	2W005G	2W01G	2W02G	2W04G	2W06G	2W08G	2W10G	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at 0.375" (9.5mm) lead length (See Fig 1.)	$I_{F(AV)}$	2.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60							A
Rating for fusing (t<8.3ms)	$I^2t$	15							A <sup>2</sup> sec
Typical thermal resistance per leg <sup>(1)</sup>	$R_{\theta JA}$ $R_{\theta JL}$	40 15							°C/W
Operating junction temperature range	$T_J$	-55 to +150							°C
Storage temperature range	$T_{STG}$	-55 to +150							°C

### Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

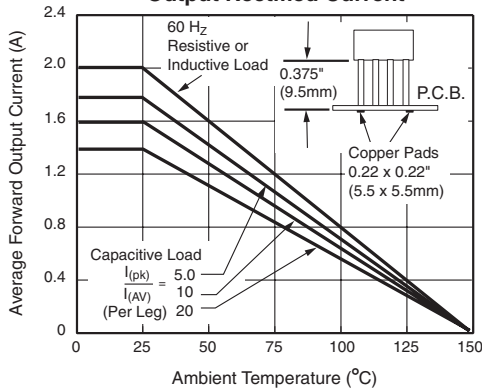
Parameter	Symbols	2W005G	2W01G	2W02G	2W04G	2W06G	2W08G	2W10G	Units	
Maximum instantaneous forward voltage drop per leg at 2.0A	$V_F$	1.1							V	
Maximum DC reverse current at rated $T_A=25^\circ C$ DC blocking voltage per leg $T_A=125^\circ C$	$I_R$	5.0 500							$\mu A$	
Typical junction capacitance per leg at 4.0V, 1MHz	$C_J$	40							20	pF

**Notes:** (1) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length P.C.B. mounting

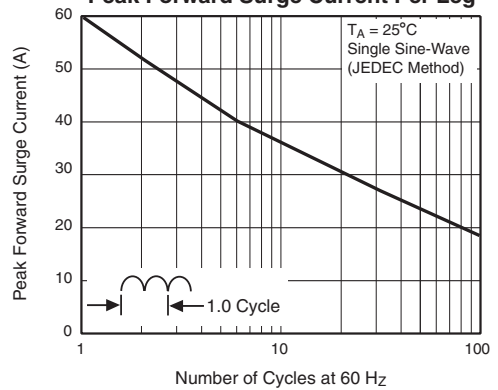


**Ratings and Characteristic Curves** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

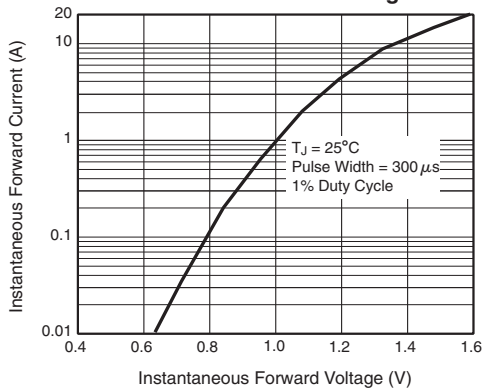
**Fig. 1 - Derating Curve Output Rectified Current**



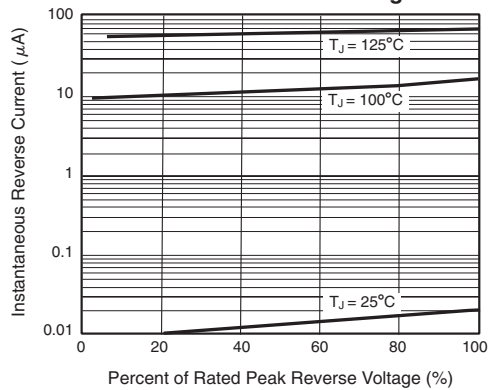
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg**



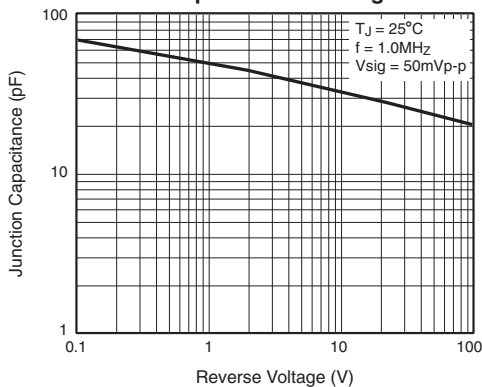
**Fig. 3 - Typical Forward Characteristics Per Leg**



**Fig. 4 - Typical Reverse Leakage Characteristics Per Leg**



**Fig. 5 - Typical Junction Capacitance Per Leg**



**Fig. 6 - Typical Transient Thermal Impedance**

