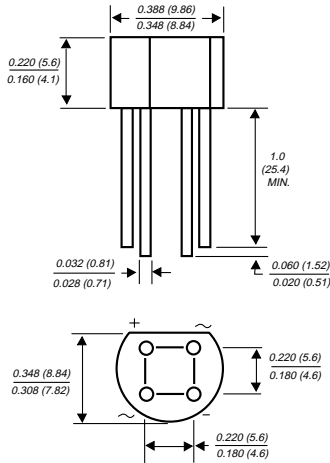


# 2W005G THRU 2W10G

## GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

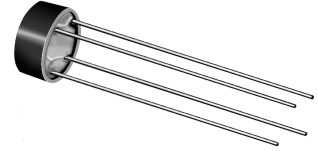
Reverse Voltage - 50 to 1000 Volts Forward Current - 2.0 Amperes

### Case Style WOG



### FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Recognition 94V-0
- ◆ This series is UL listed under the Recognized Component Index, file number E54214
- ◆ Glass passivated chip junctions
- ◆ 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 for 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 ounce, 1.1 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

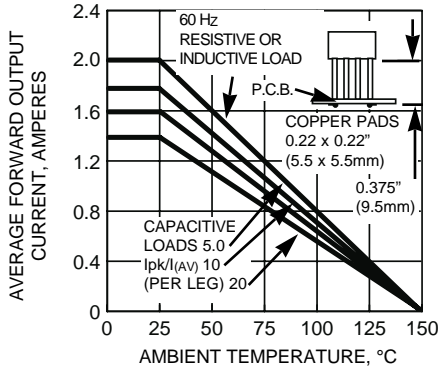
	SYMBOLS	2W 005G	2W 01G	2W 02G	2W 04G	2W 06G	2W 08G	2W 10G	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length (SEE FIG. 1)	$I_{(AV)}$	2.0							Amps
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60.0							Amps
Rating for fusing ( $t < 8.3ms$ )	$I^2t$	15.0							$A^2sec$
Maximum instantaneous forward voltage drop per leg at 2.0 Amperes	$V_F$	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage per leg	$I_R$	5.0 500.0							$\mu A$
Typical junction capacitance per leg (NOTE 1)	$C_J$	40.0					20.0		pF
Typical thermal resistance per leg (NOTE 2)	$R_{\theta JA}$ $R_{\theta JL}$	40.0 15.0							$^{\circ}C/W$
Operating junction temperature range	$T_J$	-55 to +150							$^{\circ}C$
Storage temperature range	$T_{STG}$	-55 to +150							$^{\circ}C$

### NOTES:

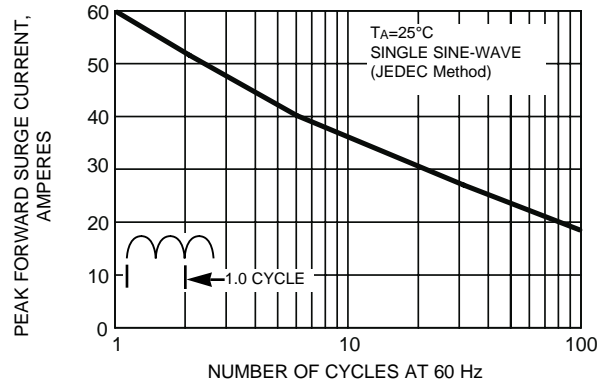
- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (2) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length for P.C.B. mounting

# RATINGS AND CHARACTERISTICS CURVES 2W005G THRU 2W10G

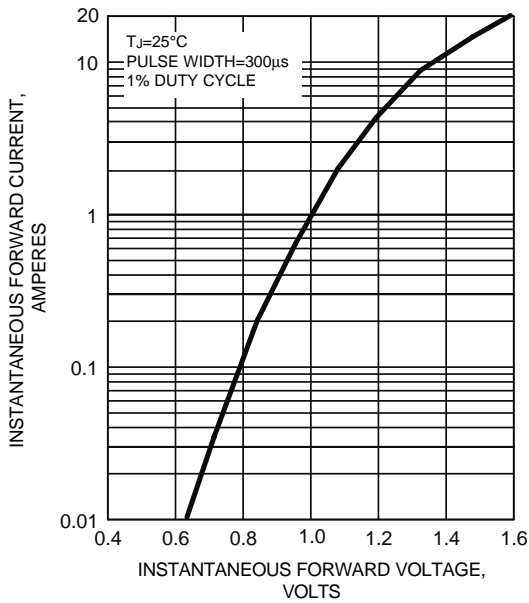
**FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT**



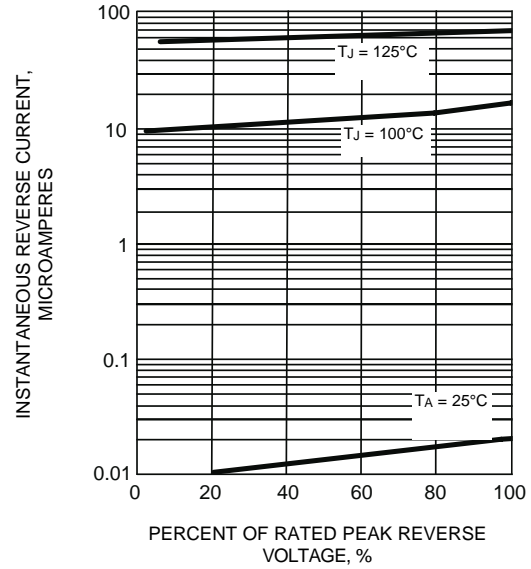
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



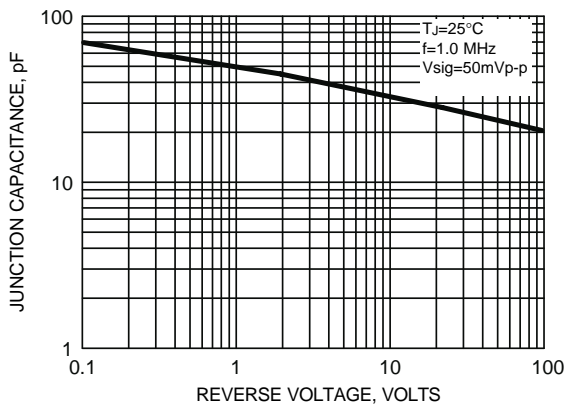
**FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG**



**FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE**

