



## Single Phase Bridge Rectifier

### Features

- Plastic package has underwriters laboratory
- Flammability classification 94V-0
- Glass passivated chip junction
- High case dielectric strength
- Ideal for printed circuit board
- High forward surge current capability
- Typical  $I_r$  less than 0.1  $\mu$ A
- High temperature soldering guaranteed:  
260°C/10 seconds, 0.375"(9.5mm) lead length at 5lbs (2.3kg) tension
- RoHS and REACH Compliance

### Mechanical Data

<b>Case:</b>	Molded plastic body over passivated functions
<b>Polarity</b>	/
<b>Terminals:</b>	Plated Leads solderable per MIL-STD-750 method 2026
<b>Mounting torque</b>	/
<b>Mounting position:</b>	Any
<b>Weight:</b>	0.04 ounce, 1.1 gram

### Maximum Ratings ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

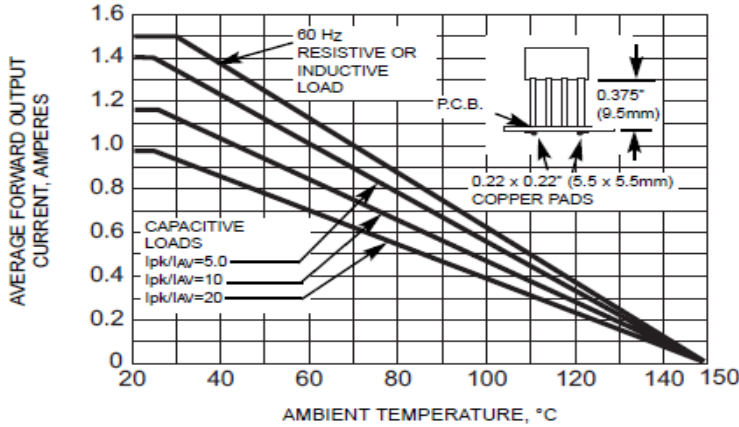
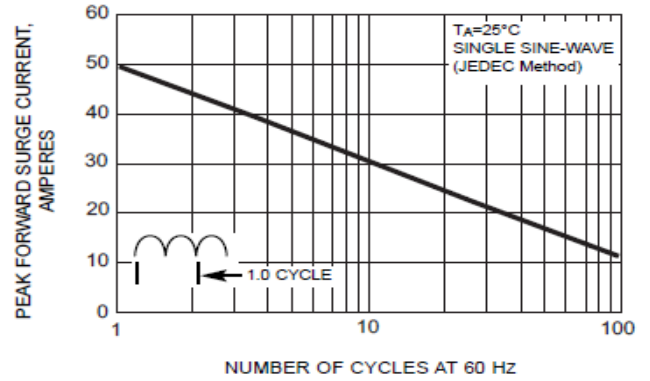
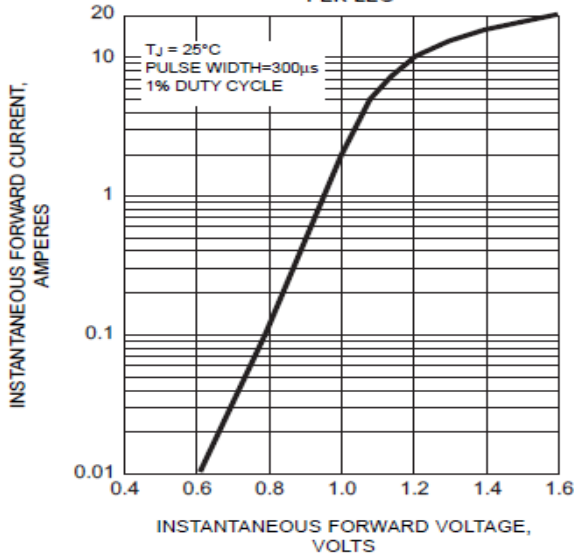
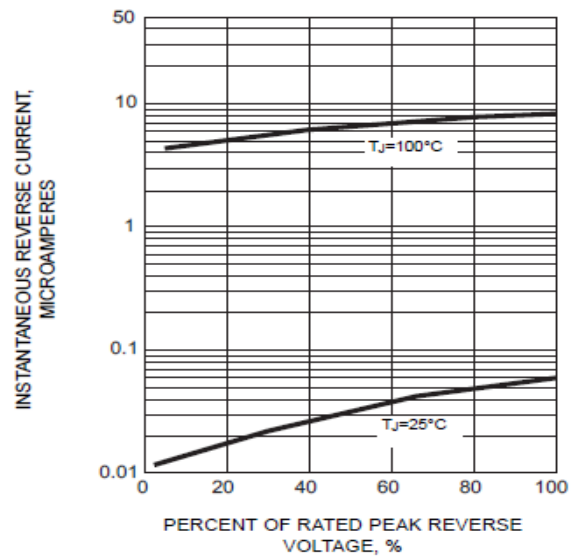
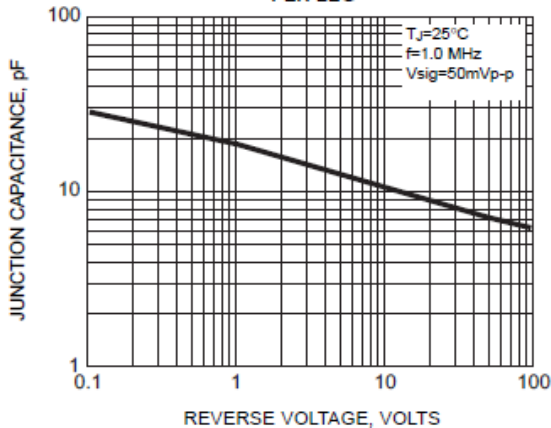
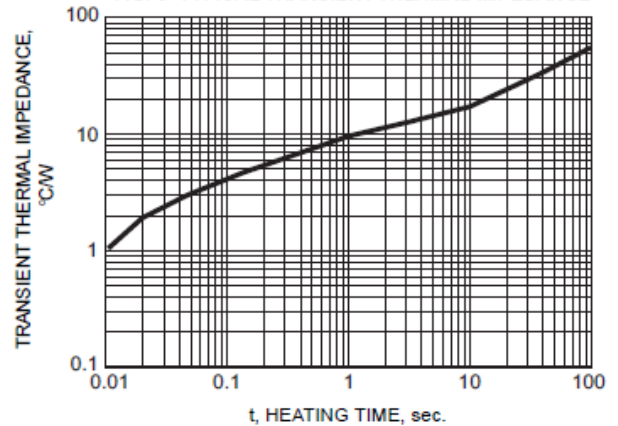
Symbol	Description	W005G	W01G	W02G	W04G	W06G	W08G	W10G	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
VRMS	Max RMS Voltage	35	70	140	280	420	560	700	V	
VDC	Max DC Blocking Voltage	50	100	200	400	600	800	1000	V	
I(AV)	Max Average Forward Rectified Current	1.5							A	TA=25°C (Note 2)
IFSM	Peak Forward Surge Current	50							A	8.3ms single half sine-wave (JEDEC method)
TJ,TSTG	Operating and Storage Temperature Range	-55 to +150							°C	
I2t	Rating for Fusing	10							A2s	T<8.3mS

### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

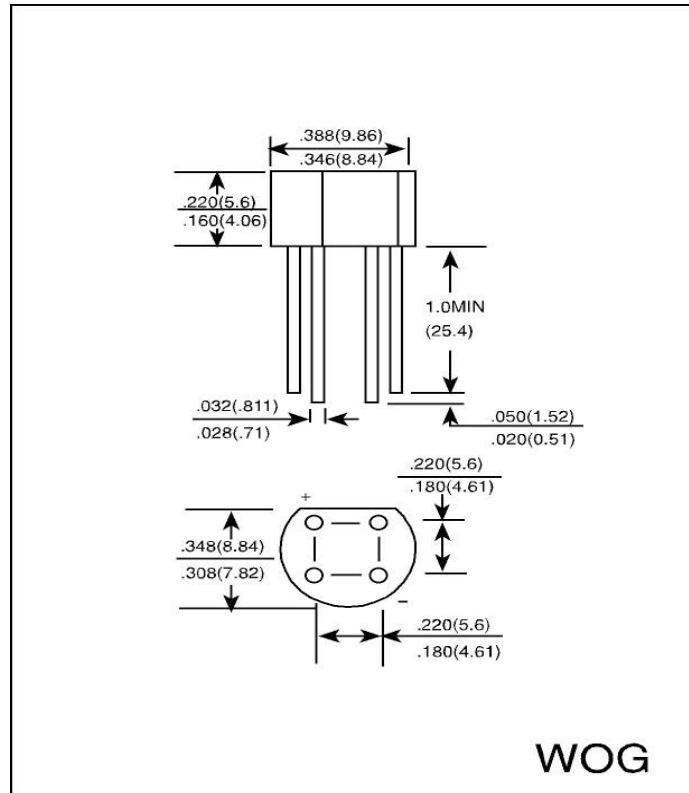
Symbol	Description	BR1005	BR101	BR102	BR104	BR106	BR108	BR1010	Unit	Conditions
V <sub>F</sub>	Max Instantaneous Forward Voltage	1.0							V	Drop per Bridge element 1.0A DC
I <sub>R</sub>	Max DC Reverse Current at Rated DC Blocking Voltage	5.0							$\mu$ A	TA=25°C
		500.0								TA=100°C
R $\theta$ -Ja	Typical Thermal Resistance	36							°C/W	Note 1
R $\theta$ -Jl		14								Note 1

#### Note:

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

**W005G ~ W10G**
**RATINGS AND CHARACTERISTIC CURVES W005G THRU W10G**
**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**


Dimensions in inches (mm)



Contact us:

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