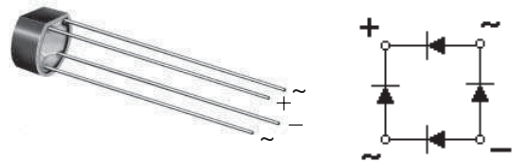


## Glass Passivated Single-Phase Bridge Rectifier

### Major Ratings and Characteristics

$I_{F(AV)}$	2.0 A
$V_{RRM}$	50 V to 1000 V
$I_{FSM}$	60 A
$I_R$	5.0 $\mu$ A
$V_F$	1.1 V
$T_j$ max.	150 °C

Case Style WOG



### Features

- UL Recognition, file number E54214
- Ideal for printed circuit boards
- Typical  $I_R$  less than 0.5  $\mu$ A
- High case dielectric strength
- High surge current capability
- Solder Dip 260 °C, 40 seconds



### Mechanical Data

**Case:** WOG

Epoxy meets UL-94V-0 Flammability rating

**Terminals:** Silver plated (E4 Suffix) leads, solderable per J-STD-002B and JESD22-B102D

**Polarity:** As marked on body

### Typical Applications

General purpose use in ac-to-dc bridge full wave rectification for Power Supply, Adapter, Charger, lighting Ballaster on Consumers and Home Appliances applications

### Maximum Ratings

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" (9.5 mm) lead length (See Fig. 1)	$I_{F(AV)}$	2.0							A
Peak forward surge current single sine-wave superimposed on rated load	$I_{FSM}$	60							A
Rating for fusing ( $t < 8.3$ ms)	$I^2t$	15							A <sup>2</sup> sec
Operating junction and storage temperature range	$T_J, T_{STG}$	- 55 to + 150							°C

### Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

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

### Thermal Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	2W005G	2W01G	2W02G	2W04G	2W06G	2W08G	2W10G	Units
Typical thermal resistance per leg <sup>(1)</sup>	$R_{\theta JA}$ $R_{\theta JL}$	40 15							°C/W

Notes:

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

### Ratings and Characteristics Curves

( $T_A = 25\text{ °C}$  unless otherwise noted)

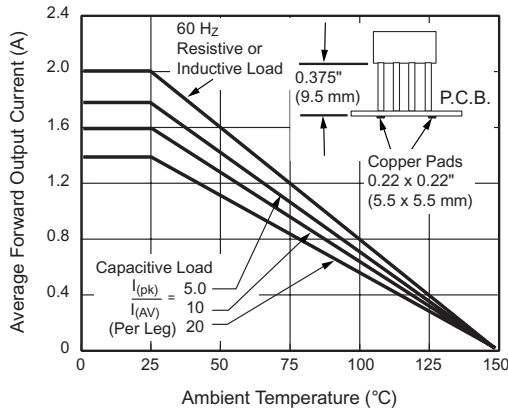


Figure 1. Derating Curve Output Rectified Current

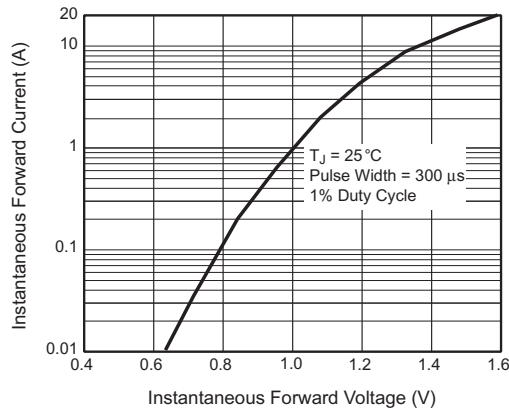


Figure 3. Typical Forward Characteristics Per Leg

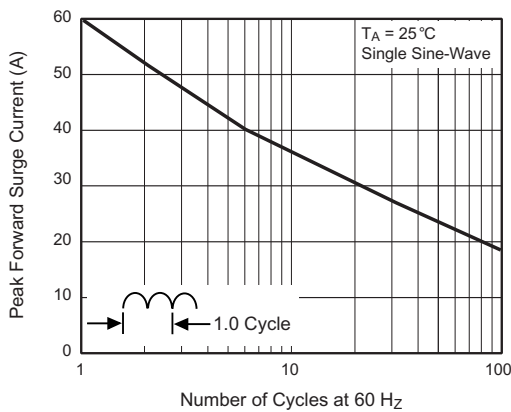


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

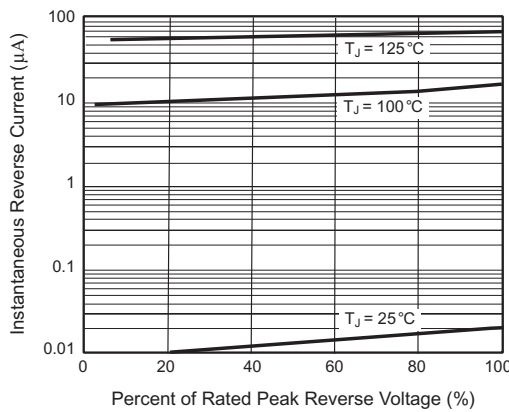


Figure 4. Typical Reverse Leakage Characteristics Per Leg

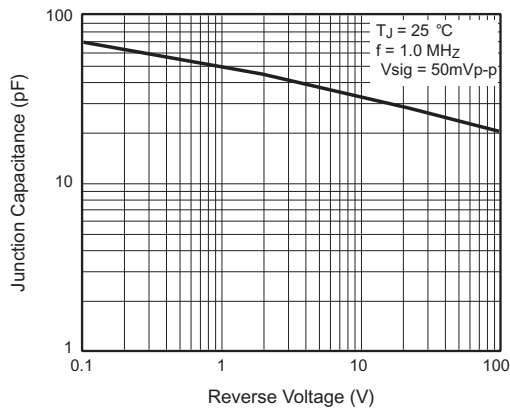


Figure 5. Typical Junction Capacitance Per Leg

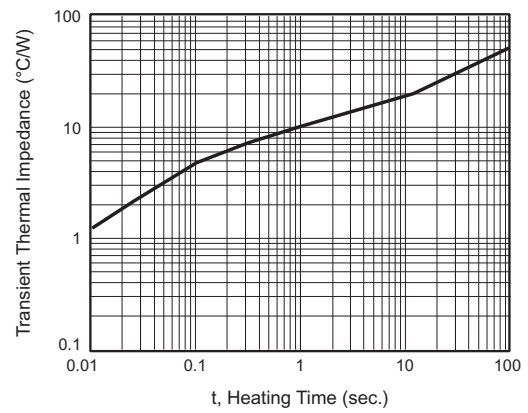
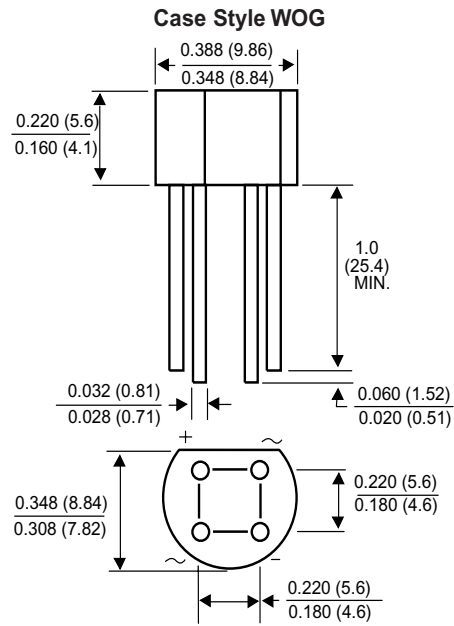


Figure 6. Typical Transient Thermal Impedance

## Package outline dimensions in inches (millimeters)





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