



## GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

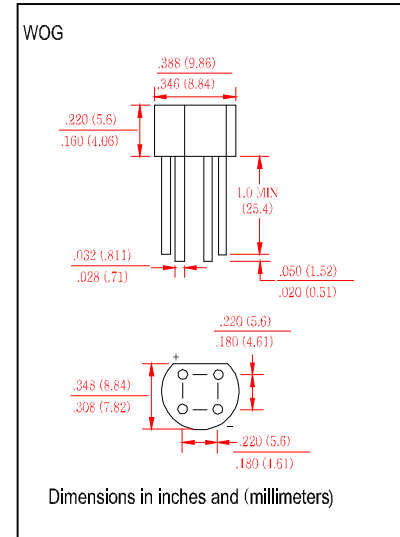
### 2W005G THRU 2W10G

#### FEATURES

- Plastic package has underwriters laboratory
- Flammability classification 94V-0
- This series is UL recognized under component index, file number E127707
- Glass passivated ship 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  $260^\circ C/10$  seconds,  $0.375''$  (9.5mm) lead length at 5 lbs (2.3kg) tension

#### MECHANICAL DATA

- Case: Epoxy, Molded Plastic body over passivated junctions
- Terminal: Plated leads solderable per MIL-STD-750 method 2026
- Mounting position: Any
- Weight: 0.04 ounce, 1.1 gram



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at  $25^\circ C$  ambient temperature unless otherwise specified

	SYMBOLS	2W005G	2W01G	2W02G	2W04G	2W06G	2W08G	2W10G	UNIT
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 at $0.375''$ (9.5mm) lead length (Note 1)	$I_{F(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	60							Amps
Rating for Fusing ( $t < 8.3ms$ )	$I^2t$	15							$A^2s$
Maximum Instantaneous Forward Voltage Drop Per element at 1.5A DC	$V_F$	1.1							Volts
Maximum Average Reverse Current at rated DC Blocking Voltage	$T_A = 25^\circ C$	5.0							$\mu A$
	$T_A = 125^\circ C$	500.0							$\mu A$
Typical Junction Capacitance per leg at 4.0V, 1MHz	$C_j$	40				20			pF
Typical Thermal Resistance per leg (NOTE 1)	$R_{\theta JL}$	15							$^\circ C/W$
	$R_{\theta JA}$	40							
Operating Temperature Range	$T_J$	(-55 to +150)							$^\circ C$
Storage Temperature Range	$T_{STG}$	(-55 to +150)							

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



# GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

## 2W005G THRU 2W10G

### RATINGS AND CHARACTERISTICS CURVES 2W005G THRU 2W10G

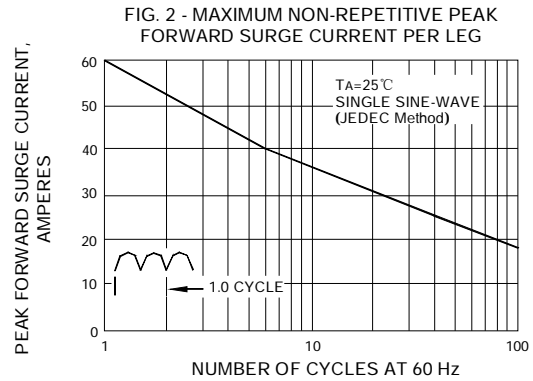
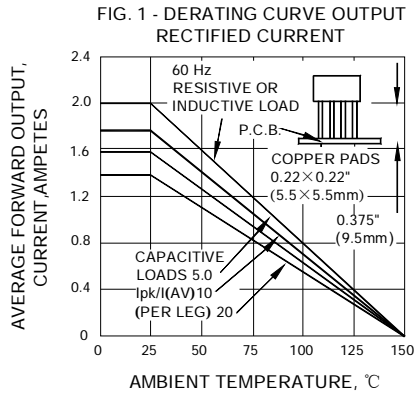


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG

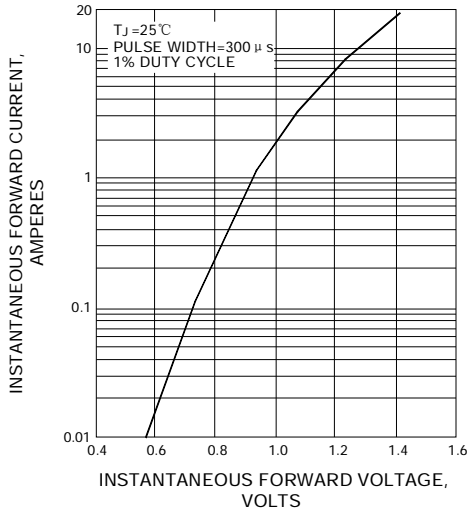


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

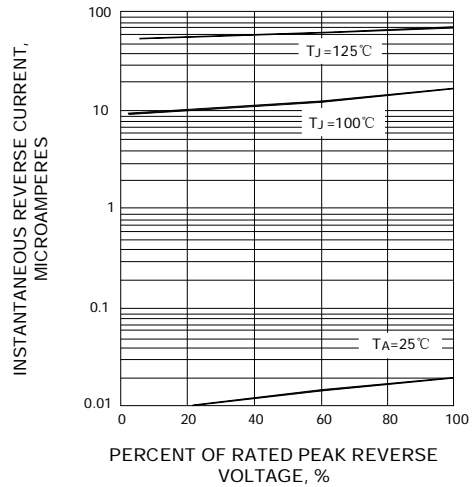


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

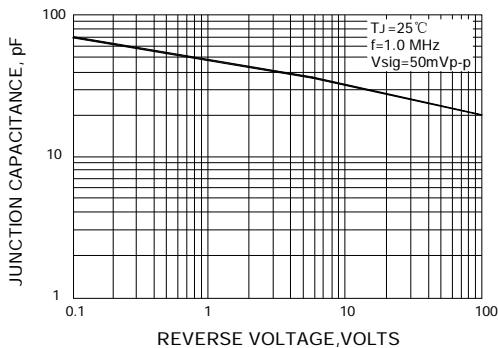


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

