LITE-ON SEMICONDUCTOR

# 2W005G thru 2W10G

**GLASS PASSIVATED BRIDGE RECTIFIERS**

REVERSE VOLTAGE **- 50** to **1000** Volts
FORWARD CURRENT **- 2.0** Amperes

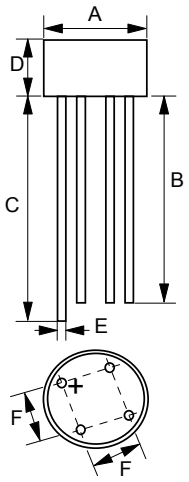
## FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability.
- Reliable low cost construction utilizing molded epoxy technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0
- UL recognized file # E95060

## MECHANICAL DATA

- Case : Molded plastic
- Polarity: As marked on Body
- Weight : 0.05 ounces, 1.3 grams
- Mounting position : Any

## WOG




| WOG | | |
|---|---|---|
| DIM. | MIN. | MAX. |
| A | 8.84 | 9.86 |
| B | 25.4 | – |
| C | 27.9 | – |
| D | 4.00 | 4.60 |
| E | 0.71 | 0.81 |
| F | 4.60 | 5.60 |
| All Dimensions in millimeter | | |

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

| CHARACTERISTICS | SYMBOL | 2W005G | 2W01G | 2W02G | 2W04G | 2W06G | 2W08G | 2W10G | UNIT |
|---|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent 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 @TA=25℃ | $I_{(AV)}$ | 2.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD) | $I_{FSM}$ | 60 | | | | | | | A |
| Maximum forward Voltage at 2.0A DC | $V_F$ | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @$T_J$ =25℃<br>at Rated DC Blocking Voltage @$T_J$=125℃ | $I_R$ | 5.0<br>500 | | | | | | | uA |
| $I^2t$ Rating for fusing (t < 8.3ms) | $I^2t$ | 15 | | | | | | | $A^2S$ |
| Typical Junction Capacitance per element (Note 1) | $C_J$ | 25 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$<br>$R_{\theta JL}$<br>$R_{\theta JC}$ | 40<br>25<br>15 | | | | | | | ℃/W |
| Operating Temperature Range | $T_J$ | -55 to + 150 | | | | | | | ℃ |
| Storage Temperature Range | $T_{STG}$ | -55 to + 150 | | | | | | | ℃ |

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Thermal Resistance Junction to Ambient

REV. 5, Sep-2010, KBDD02

FIG.1 - FORWARD CURRENT DERATING CURVE

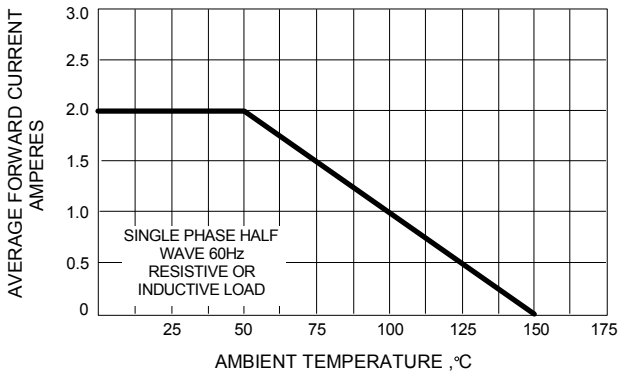



FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

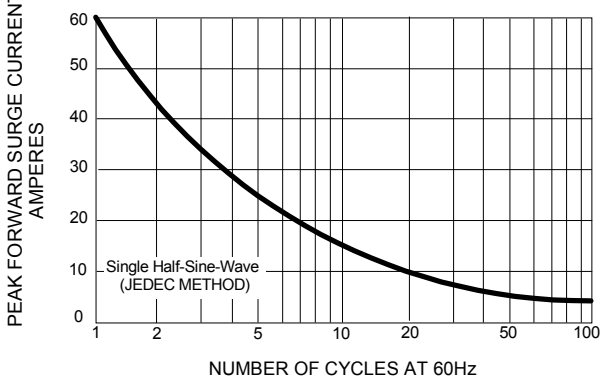



FIG.3 - TYPICAL JUNCTION CAPACITANCE

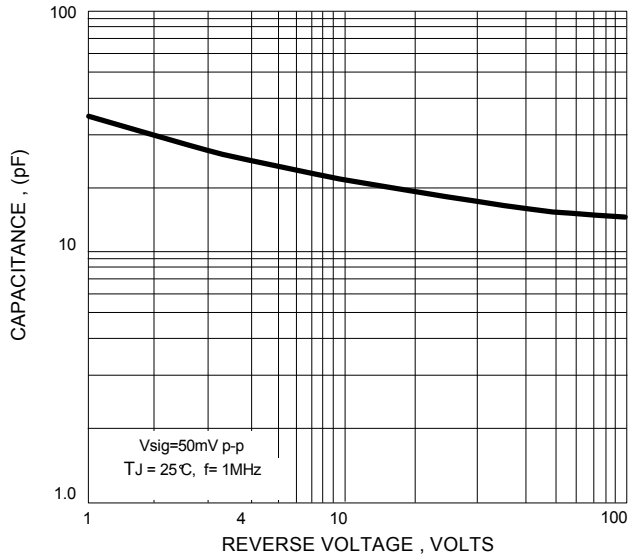



FIG.4 - TYPICAL FORWARD CHARACTERISTICS

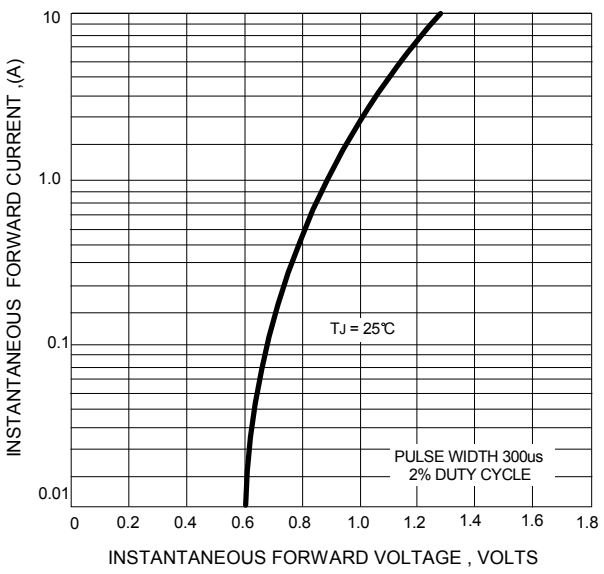
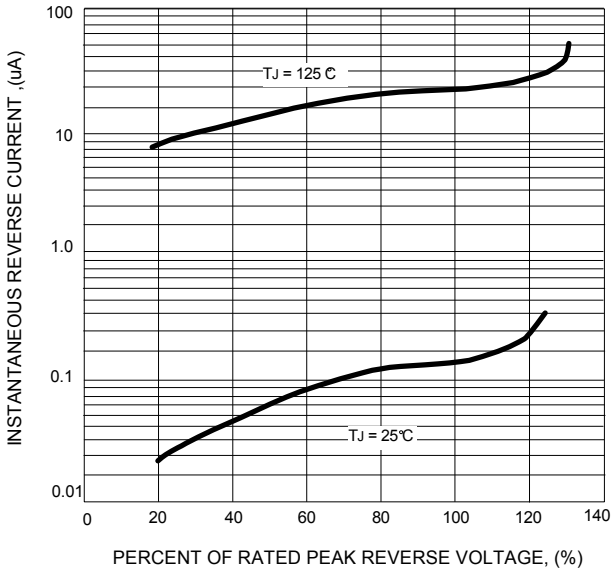



FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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