

A2W005G - A2W10G

AVALANCHE GLASS PASSIVATED BRIDGE RECTIFIERS

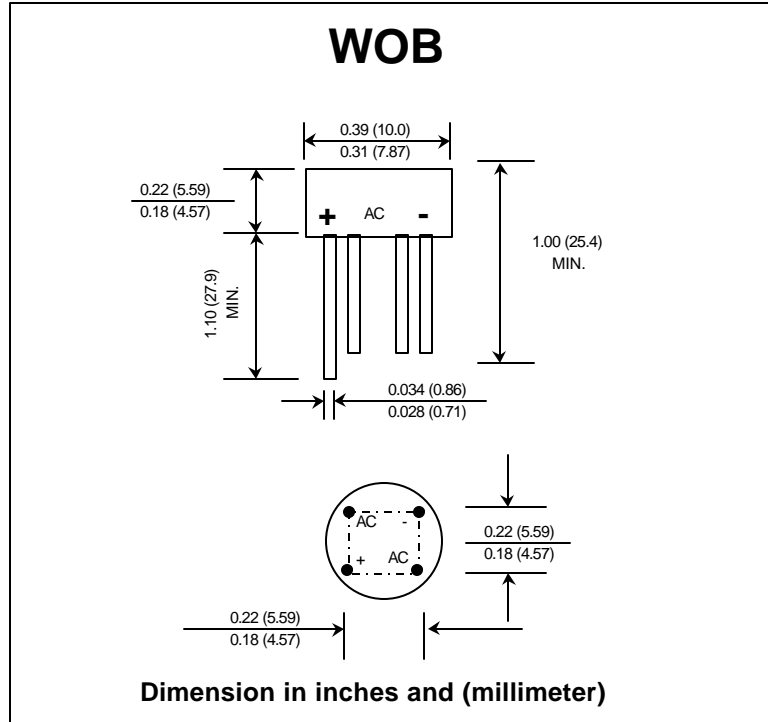
PRV : 50 - 1000 Volts
I_o : 2.0 Amperes

FEATURES :

- * Glass passivated chip
- * High case dielectric strength
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Ideal for printed circuit board

MECHANICAL DATA :

- * Case : Reliable low cost construction utilizing molded plastic technique
- * Epoxy : UL94V-O rate flame retardant
- * Terminals : Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Polarity symbols marked on case
- * Mounting position : Any
- * Weight : 1.29 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

| RATING | SYMBOL | A2W 005G | A2W 01G | A2W 02G | A2W 04G | A2W 06G | A2W 08G | A2W 10G | UNIT |
|---|-----------------------|---------------|---------|---------|---------|---------|---------|---------|------------------|
| Maximum Recurrent 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 |
| Minimum Avalanche Breakdown Voltage at 100 μA | V _{BO(min.)} | 100 | 150 | 250 | 450 | 700 | 900 | 1100 | Volts |
| Maximum Avalanche Breakdown Voltage at 100 μA | V _{BO(max.)} | 550 | 600 | 700 | 900 | 1150 | 1350 | 1550 | Volts |
| Maximum Average Forward Current 0.375" (9.5 mm) lead length T _c = 50°C | I _{F(AV)} | 2.0 | | | | | | | Amps. |
| Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method) | I _{FSM} | 50 | | | | | | | Amps. |
| Rating for fusing (t < 8.3 ms.) | I ² t | 10 | | | | | | | A ² S |
| Maximum Forward Voltage per Diode at I _F = 1.0 Amp. | V _F | 1.0 | | | | | | | Volts |
| Maximum DC Reverse Current T _a = 25 °C at Rated DC Blocking Voltage T _a = 100 °C | I _R | 10 | | | | | | | μA |
| | I _{R(H)} | 1.0 | | | | | | | mA |
| Typical Junction Capacitance per Diode (Note 1) | C _J | 24 | | | | | | | pf |
| Typical Thermal Resistance (Note 2) | RθJA | 36 | | | | | | | °C/W |
| Operating Junction Temperature Range | T _J | - 50 to + 150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | - 50 to + 150 | | | | | | | °C |

Notes :

- 1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
- 2) Thermal resistance from Junction to Ambient at 0.375" (9.5 mm) lead length P.C. Board with, 0.22" x 0.22" (5.5 x 5.5 mm) copper Pads.

RATING AND CHARACTERISTIC CURVES (A2W005G - A2W10G)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

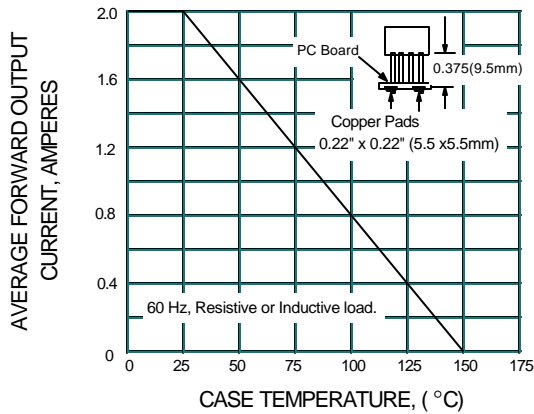


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

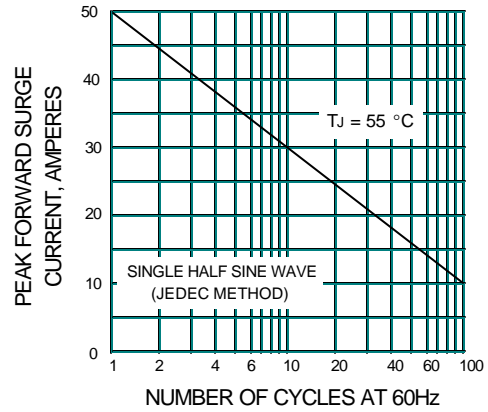


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

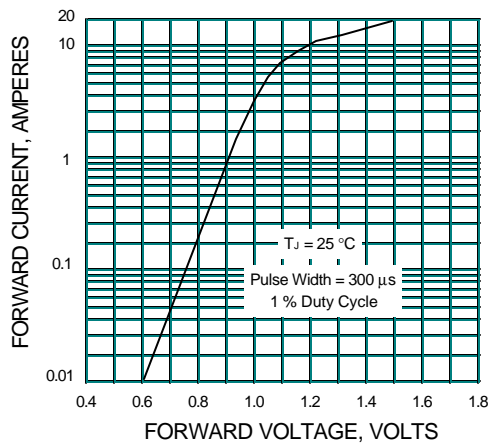


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

