

A2W005G - A2W10G

AVALANCHE GLASS PASSIVATED BRIDGE RECTIFIERS

PRV : 50 - 1000 Volts

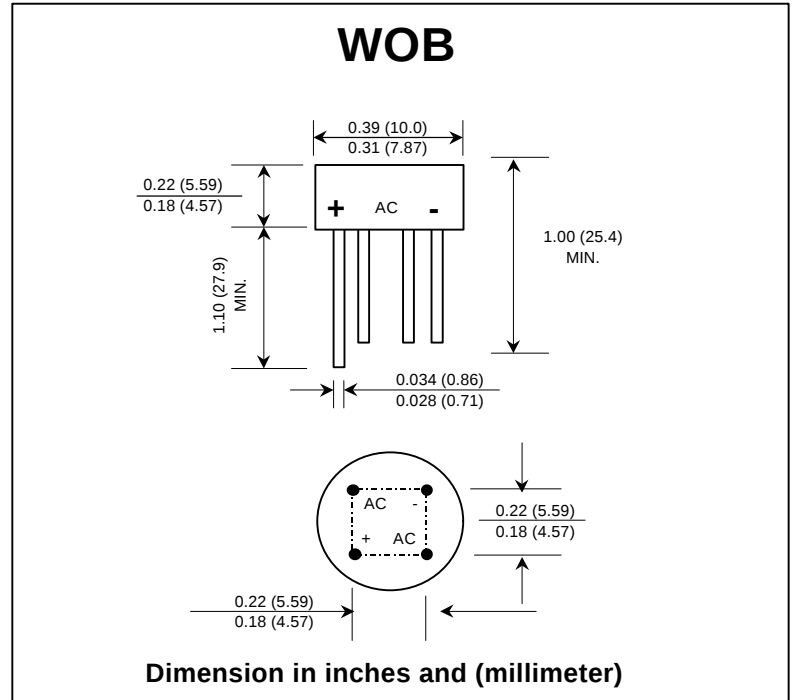
Io : 2.0 Amperes

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
- * **Pb / RoHS Free**

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	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
Minimum Avalanche Breakdown Voltage at 100 μ A	$V_{BO(min.)}$	100	150	250	450	700	900	1100	V
Maximum Avalanche Breakdown Voltage at 100 μ A	$V_{BO(max.)}$	550	600	700	900	1150	1350	1550	V
Maximum Average Forward Current 0.375" (9.5 mm) lead length $T_c = 50^\circ\text{C}$	$I_{F(AV)}$	2.0							A
Maximum Peak Forward Surge Current Single half sine wave, Superimposed on rated load	I_{FSM}	50							A
Rating for fusing ($t < 8.3$ ms.)	I^2t	10							A ² S
Maximum Forward Voltage per Diode at $I_F = 1.0$ A	V_F	1.0							V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 100^\circ\text{C}$	I_R	10							μ A
	$I_{R(H)}$	1.0							mA
Typical Junction Capacitance per Diode (Note 1)	C_J	24							pf
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	36							$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	- 50 to + 150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 50 to + 150							$^\circ\text{C}$

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

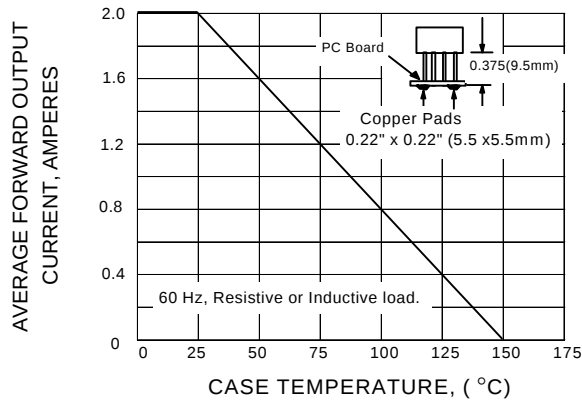


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

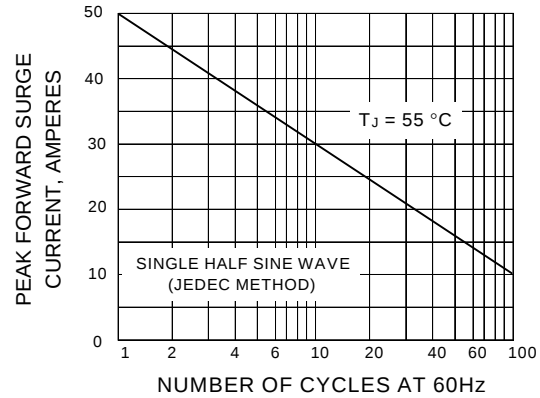


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

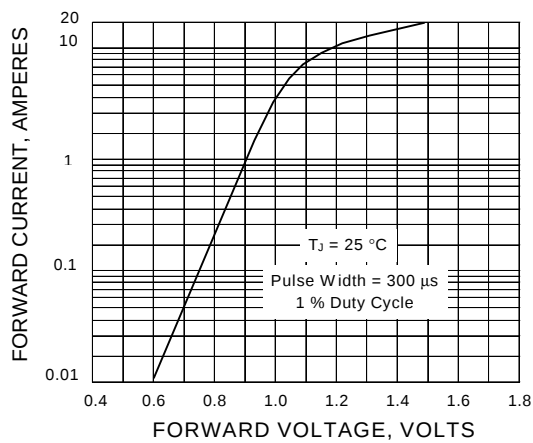


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

