GM GarboMicro Semiconductor

2W005G thru 2W13G

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE **- 50** to **1350** Volts
FORWARD CURRENT **- 2.0** Amperes

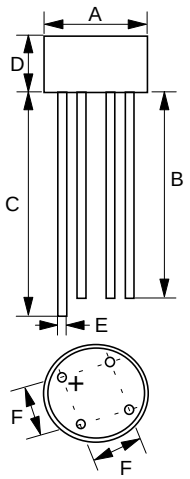
FEATURES

- 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
- .

MECHANICAL DATA

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

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.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	2W005G	2W01G	2W02G	2W04G	2W06G	2W08G	2W10G	2W12G	2W13G	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	1200	1350	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	840	980	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	1200	1350	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℃ at Rated DC Blocking Voltage @T_J=125℃	I_R	5.0 500									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)	$R_{\theta JA}$	40									℃/W
Operating Temperature Range	T_J	-55 to + 150									℃
Storage Temperature Range	T_{STG}	-55 to + 150									℃

FIG.1 - FORWARD CURRENT DERATING CURVE

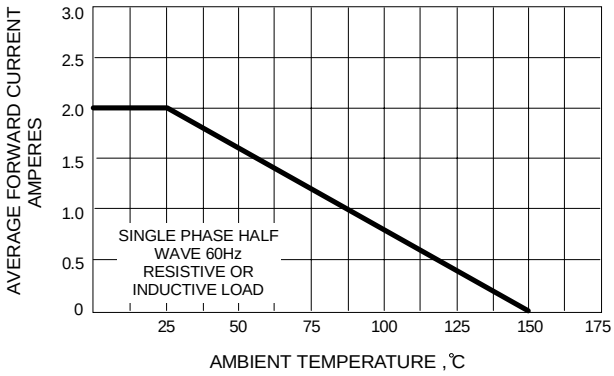


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

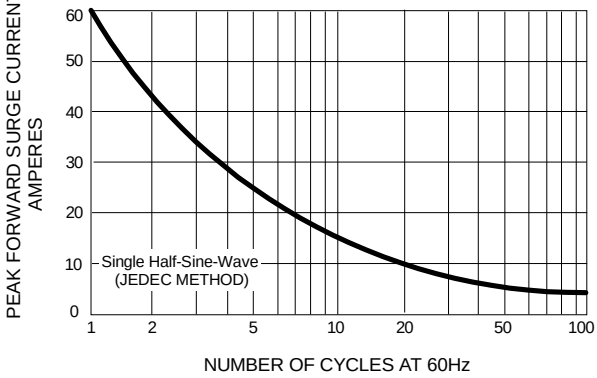


FIG.3 - TYPICAL JUNCTION CAPACITANCE

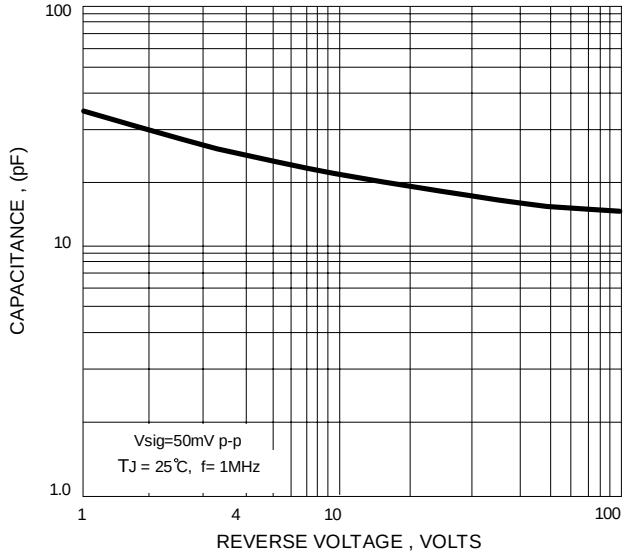


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

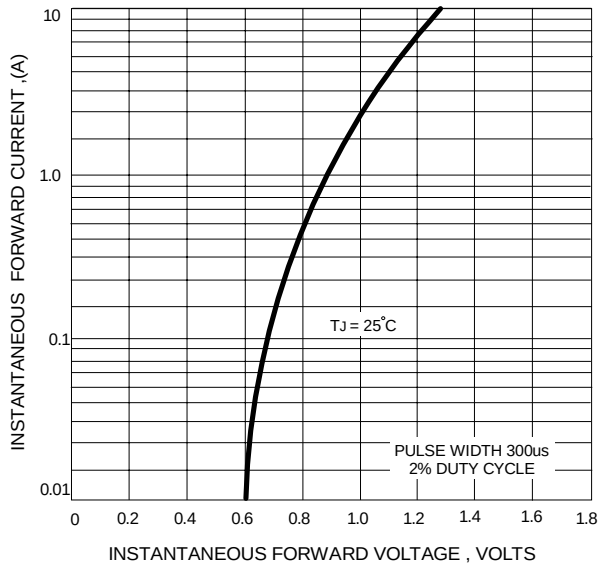


FIG.5 - TYPICAL REVERSE CHARACTERISTICS