HER301G THRU **HER308G**

GM GarboMicro Semiconductor

3.0 AMPS. Glass Passivated High Efficient Rectifiers

	Voltage Range 50 to 1000 Volts Current 3.0 Amperes

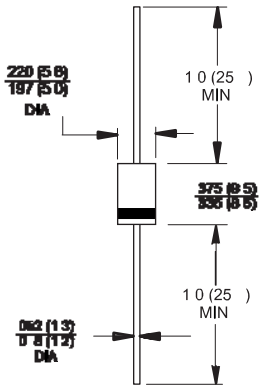
Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

Mechanical Data

- Case: Molded plastic
- Epoxy: UL 94V-O rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed: 260°C/10 seconds/.375",(9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- Mounting position: Any
- Weight: 1.1 grams

DO-201AD



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

Type Number	**Symbol**	**HER 301G**	**HER 302G**	**HER 303G**	**HER 304G**	**HER 305G**	**HER 306G**	**HER 307G**	**HER 308G**	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @T_A = 55℃	$I_{(AV)}$	3.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	125								A
Maximum Instantaneous Forward Voltage @ 3.0A	V_F	1.0				1.3	1.7			V
Maximum DC Reverse Current @ T_A=25℃ at Rated DC Blocking Voltage @ T_A=125℃	I_R	10.0 200								uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	50					75			nS
Typical Junction Capacitance (Note 2)	Cj	60					35			pF
Typical Thermal Resistance (Note 3)	$R\theta_{JA}$ $R\theta_{JL}$	35 10								℃/W
Operating & Storage Temperature Range	T_J /T_{STG}	-65 to +150								℃

Notes: 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.
3. Mount on Cu-Pad Size 16mm x 16mm on P.C.B

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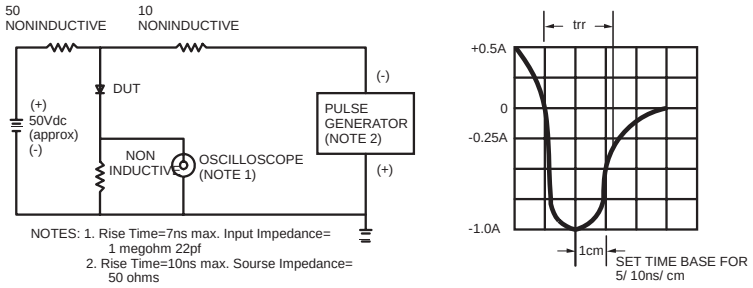
RATINGS AND CHARACTERISTIC CURVES (HER301G THRU HER308G)

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance= 1 megohm 22pf
2. Rise Time=10ns max. Sourse Impedance= 50 ohms

FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

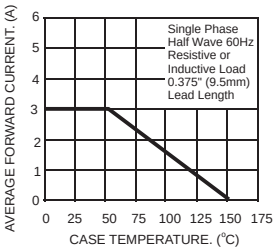


FIG.3- TYPICAL REVERSE CHARACTERISTICS

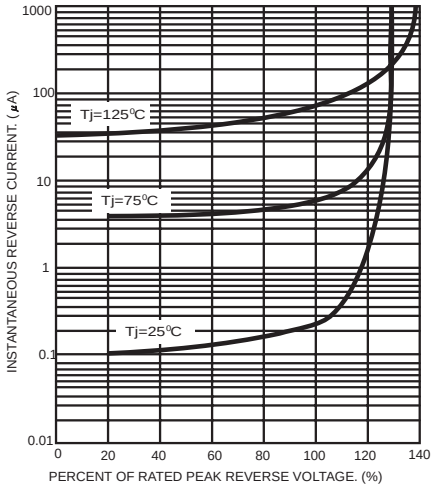


FIG.4- TYPICAL FORWARD CHARACTERISTICS

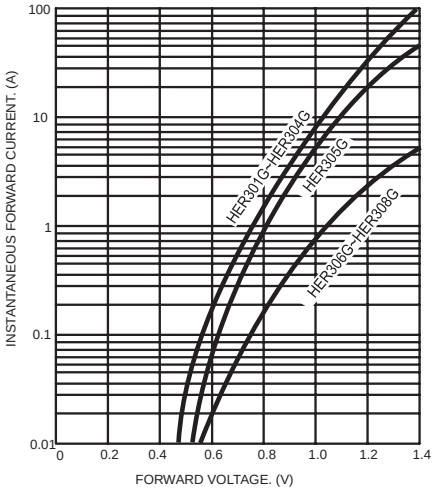


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

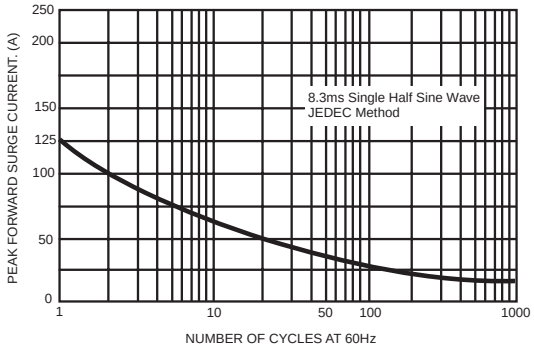


FIG.6- TYPICAL JUNCTION CAPACITANCE