

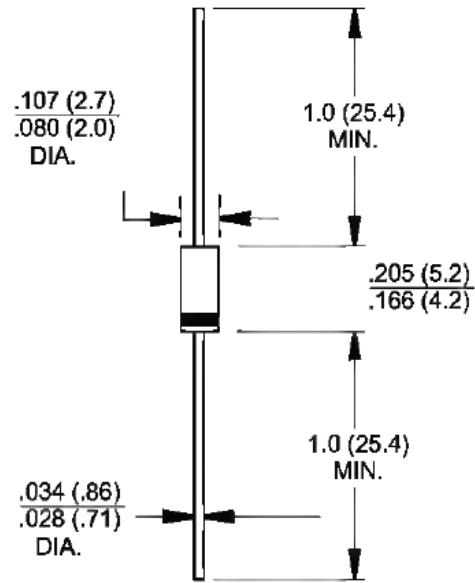
**HER101G - HER108G**  
 1.0AMP. Glass Passivated High Efficient Rectifiers  
**DO-41**

**Features**

- ◇ Glass passivated chip junction
- ◇ High efficiency, Low VF
- ◇ High current capability
- ◇ High reliability
- ◇ High surge current capability
- ◇ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode

**Mechanical Data**

- ◇ Case: Molded plastic DO-41
- ◇ Epoxy: UL 94V-0 rate flame retardant
- ◇ Lead: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ◇ Polarity: Color band denotes cathode
- ◇ High temperature soldering guaranteed: 260 °C/10s / .375", (9.5mm) lead lengths at 5 lbs, (2.3kg) tension
- ◇ Weight: 0.34 grams



**Dimensions in inches and (millimeters)**



**Marking Diagram**

- HER10XG = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

**Maximum Ratings and Electrical Characteristics**

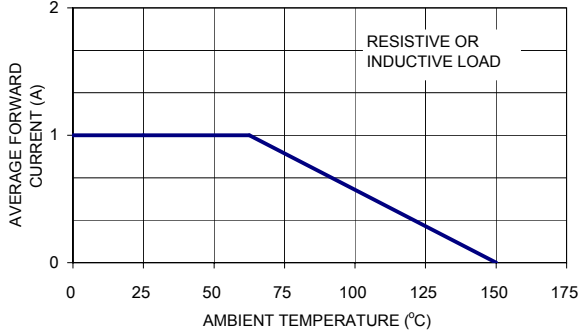
Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%

Type Number	Symbol	HER 101G	HER 102G	HER 103G	HER 104G	HER 105G	HER 106G	HER 107G	HER 108G	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ T <sub>A</sub> =55°C	I <sub>F(AV)</sub>	1								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	30								A
Maximum Instantaneous Forward Voltage (Note 1) @ 1 A	V <sub>F</sub>	1.0			1.3		1.7			V
Maximum DC Reverse Current at @ T <sub>A</sub> =25 °C	I <sub>R</sub>	5								uA
Rated DC Blocking Voltage @ T <sub>A</sub> =125 °C		150								uA
Maximum Reverse Recovery Time (Note 2)	T <sub>rr</sub>	50				75				nS
Typical Junction Capacitance (Note 3)	C <sub>j</sub>	15				10				pF
Typical Thermal Resistance (Note 4)	R <sub>θJA</sub> R <sub>θJC</sub>	60				15				°C/W
Operating Temperature Range	T <sub>J</sub>	- 65 to + 150								°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 150								°C

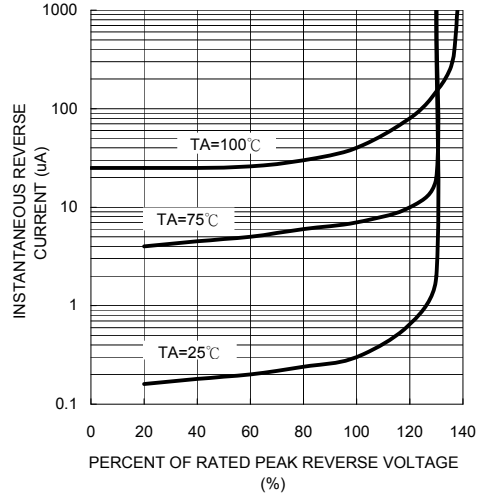
- Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle
- Note 2: Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A
- Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.
- Note 4: Mount on Cu-Pad Size 5mm x 5mm on PCB

**RATINGS AND CHARACTERISTIC CURVES (HER101G THRU HER108G)**

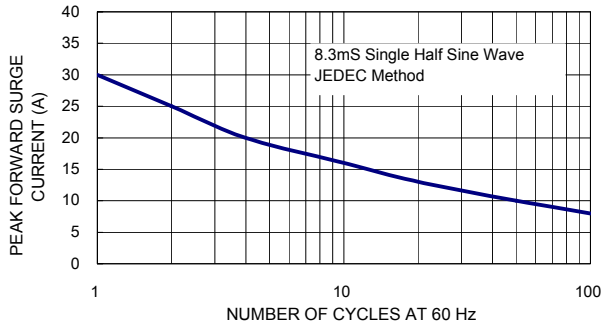
**FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE**



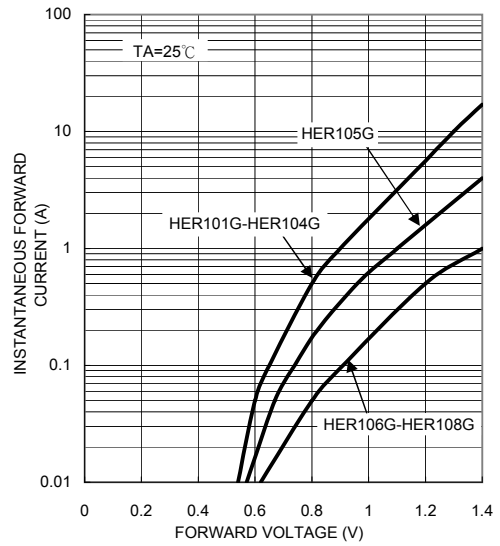
**FIG. 2- TYPICAL REVERSE CHARACTERISTICS**



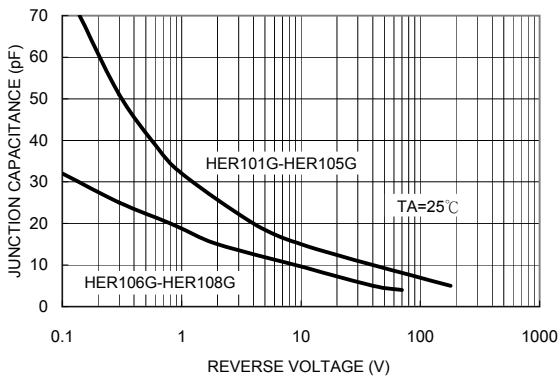
**FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG. 5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4- TYPICAL JUNCTION CAPACITANCE**



**FIG. 6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**

