Data Sheet 4821, Rev. -

Green Products

# HER601-G THRU HER608-G

## **HIGH EFFICIENCY RECTIFIERS**

Reverse Voltage - 50 to 1000 Volts Forward Current - 6.0 Amperes

# 0.360(9.1) 0.340(8.6) DIA. 1.0 (25.4) MIN. 0.360(9.1) 0.340(8.6) 1.0 (25.4) MIN. 0.062(1.3) 0.048(1.2) DIA. Dimensions in inches and (millimeters)

### **FEATURES**

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ High speed switching for high efficiency
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- → High temperature soldering guaranteed: 250°C/10 seconds,0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension
- ◆ Green Products in Compliance with the RoHS Directive

### **MECHANICAL DATA**

Case: R-6 molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750,

Method 2026

Polarity: Color band denotes cathode end

**Mounting Position**: Any

Weight: 0.072 ounce, 2.05 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

	SYMBOLS	HER 601-G	HER 602-G	HER 603-G	HER 604-G		HER 606-G	HER 607-G	HER 608-G	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	VOLTS
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	VOLTS
Maximum DC blocking voltage	VDC	50	100	200	300	400	600	800	1000	VOLTS
Maximum average forward rectified current	Icaso	l <sub>(AV)</sub> 6.0							Amno	
0.375"(9.5mm) lead length at Ta=50℃	I(AV)	3.0							Amps	
Peak forward surge current							200.0			
8.3ms single half sine-wave superimposed on	IFSM	300.0				Amps				
rated load (JEDEC Method)										
Maximum instantaneous forward voltage at 6.0A	V <sub>F</sub>		1.0		1.	.3		1.70		Volts
Maximum DC reverse current T <sub>A</sub> =25℃		10.0 200.0							μΑ	
at rated DC blocking voltage Ta=100 ℃	lR									
Maximum reverse recovery time (NOTE 1)	trr	50			70		ns			
Typical junction capacitance (NOTE 2)	Cı	100.0			65.0		pF			
Typical thermal resistance (NOTE 3)	Reja		10.0						°C/W	
Operating junction and storage temperature range	ТЈ,Тѕтс	-65 to +150							°C	

Note: 1. Reverse recovery condition IF=0.5A, IR=1.0A, Irr=0.25A

2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

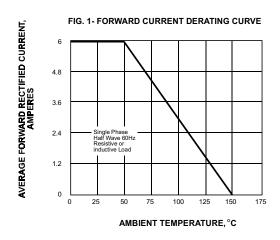
3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

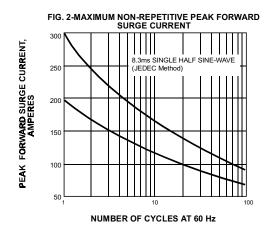
- 221 West Industry Court Deer Park, NY 11729-4681 (631) 586-7600 FAX (631) 242-9798
  - World Wide Web Site http://www.sensitron.com
     E-Mail Address sales@sensitron.com

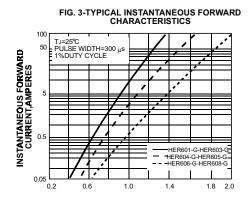
Data Sheet 4821, Rev. -

### **Green Products**

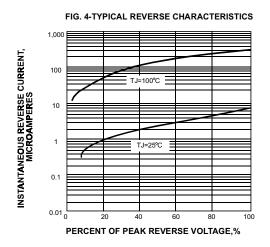
### RATINGS AND CHARACTERISTIC CURVES HER601-G THRU HER608-G

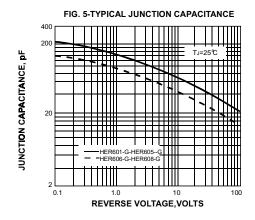


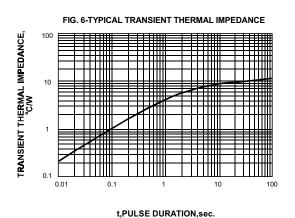




INSTANTANEOUS FORWARD VOLEAGE, VOLTS







<sup>• 221</sup> West Industry Court ☐ Deer Park, NY 11729-4681 ☐ (631) 586-7600 FAX (631) 242-9798 •

<sup>•</sup> World Wide Web Site - http://www.sensitron.com • E-Mail Address - sales@sensitron.com •

Data Sheet 4821, Rev. -

**Green Products** 

### DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior not ice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets. 4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed writ ten permission of Sensitron Semiconductor.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.