

# **Glass Passivated High Efficient Rectifiers**

### **FEATURES**

- Glass passivated chip junction
- High efficiency, Low VF
- High current capability
- High surge current capability
- Low power loss
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition

## **MECHANICAL DATA**

Case: DO-204AC (DO-15)

Molding compound, UL flammability classification rating 94V-0 Base P/N with suffix "G" on packing code - green compound (halogen-free) Base P/N with prefix "H" on packing code - AEC-Q101 qualified **Terminal:** Matte tin plated leads, solderable per JESD22-B102 Meet JESD 201 class 1A whisker test with prefix "H" on packing code meet JESD 201 class 2 whisker test **Weight:** 0.4g (approximately)



DO-204AC (DO-15)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ( $T_A$ =25 $^{\circ}C$ unless otherwise noted)										
PARAMETER		HER	HER	HER	HER	HER	HER	HER	HER	UNIT
	SYMBOL	201G	202G	203G	204G	205G	206G	207G	208G	
Maximum repetitive 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		50	100	200	300	400	600	800	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	2					А			
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	60					A			
Maximum instantaneous forward voltage (Note 1) @ 2 A	V <sub>F</sub>		1	1.0 1.3 1.7			V			
Maximum reverse current @ rated VR $T_J$ =25 $^{\circ}C$ $T_J$ =125 $^{\circ}C$	I <sub>R</sub>	5 150				μA				
Maximum reverse recovery time (Note 2)	Trr	50 75					ns			
Typical junction capacitance (Note 3)	Cj	35 20					pF			
Typical thermal resistance	R <sub>θJA</sub>	60			<sup>o</sup> C/W					
Operating junction temperature range	TJ	- 55 to +150				°C				
Storage temperature range	T <sub>STG</sub>	- 55 to +150						°C		

Note 1: Pulse test with PW=300  $\mu$ s, 1% duty cycle

Note 2: Reverse Recovery Test Conditions:  $I_F$ =0.5A,  $I_R$ =1.0A,  $I_{RR}$ =0.25A

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.



# HER201G thru HER208G

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ORDERING INFORMATION	
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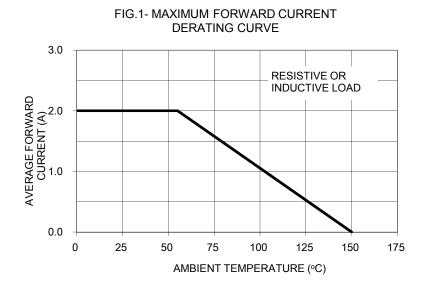
PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING			
	QUALIFIED		CODE					
	Prefix "H"	A0		DO-15	1,500 / Ammo box			
HER20xG (Note 1)		R0	Suffix "G"	DO-15	3,500 / 13" Paper reel			
		B0		DO-15	1,000 / Bulk packing			

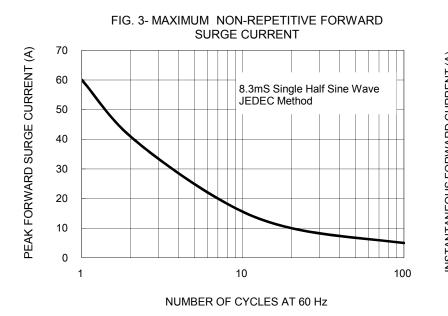
Note 1: "x" defines voltage from 50V (HER201G) to 1000V (HER208G)

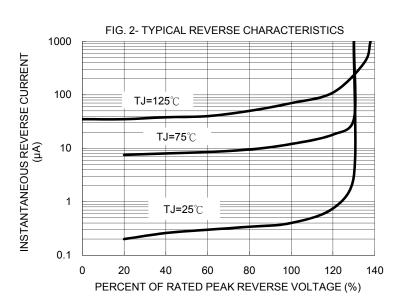
EXAMPLE								
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION			
HER201G A0	HER201G		A0					
HER201G A0G	HER201G		A0	G	Green compound			
HER201GHA0	HER201G	Н	A0		AEC-Q101 qualified			

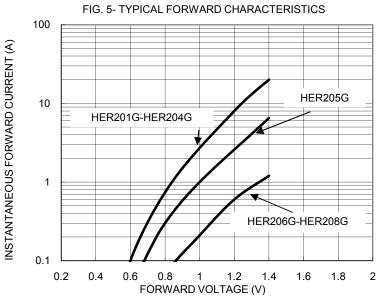
### **RATINGS AND CHARACTERISTICS CURVES**

(TA=25 $^{\circ}$ C unless otherwise noted)











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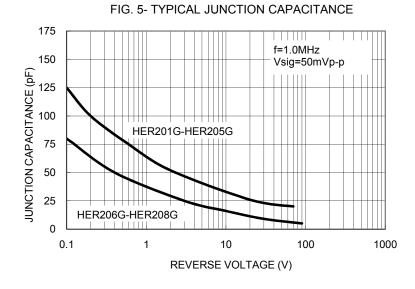
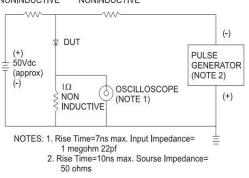
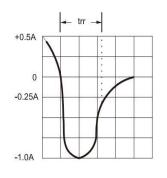


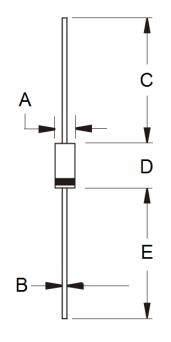
FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

### 50Ω 10Ω NONINDUCTIVE NONINDUCTIVE





### PACKAGE OUTLINE DIMENSIONS



#### Unit (mm) Unit (inch) DIM. Min Max Min Max А 2.60 3.60 0.102 0.142 В 0.70 0.035 0.90 0.028 С 25.40 1.000 -D 5.80 7.60 0.228 0.299 Е 25.40 1.000 \_

### **MARKING DIAGRAM**



P/N =Specific Device CodeG =Green CompoundYWW =Date Code

F = Factory Code



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