

# HER101G THRU HER108G

### GLASS PASSIVATED HIGH EFFICIENCY RECTIFIER

DO-41

0. 107 (2. 7) 0. 080 (2. 0) DIA

> 0. 034 (0. 85) 0. 028 (0. 71) DIA

**Dimensions in inches and (millimeters)** 

Reverse Voltage - 50 to 1000 Volts

1.0(25.4) Min

0. 205 (5. 20) 0. 180 (4. 10)

1.0(25.4) Min

Forward Current - 1.0Ampere

#### FEATURES

- . Plastic package has Underwrites Laboratory
- Flammability Classification 94V-0 . Low forward voltage drop
- . High current capability
- . High reliability
- . Low power loss,high effciency
- . Glass passivated junction
- . High speed seitching
- . Low leakage

### **MECHANICAL DATA**

- . Case: JEDEC DO-41 molded plastic body
- . Epoxy: UL94V-0 rate flame retardant
- . Lead: plated axial leads, solderable per MIL-STD-750, method 2026
- . Polarity: Color band denotes cathode end
- . Mounting Position: Any
- . Weight: 0.012 ounce, 0.33 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

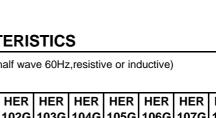
(Ratings at 25  $^\circ\!\!\!\mathrm{C}$  ambient temperature unless otherwise specified,Single phase,half wave 60Hz,resistive or inductive)

load. For capacitive load, derate current by 20%)

load. For capacitive load, derate current by 20%)	Symbols	HER 101G		HER 103G		HER 105G		HER 107G	HER 108G	Units
Maximum repetitive peak reverse voltage	Vrrm	50	100	200	300	400	600	800	1000	Volts
Maximum RMS voltage	Vrms	35	70	140	210	280	420	560	700	Volts
Maximum DC blocking voltage	VDC	50	100	200	300	400	600	800	1000	Volts
Macimum average forward rectified current 0.375"(9.5mm)lead length at Ta=50 $^\circ\!\!\mathrm{C}$	I(AV)	1.0							Amp	
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method)	IFSM	30.0							Amps	
Maximum instantaneous forward voltage at 1.0 A	VF		1.0		1	.3		1.7		Volts
Maximum DC Rreverse Current at rated DC blocking voltage	5.0								μΑ	
Maximum full load reverse current full cycle average. 0.375"(9.5mm)lead length at TL=55 $^\circ\! C$	IR 100									
Maximum reverse recovery time(Note 1)	Trr		50				70		ns	
Typical junction Capacitance(Note 2)	С		20 15					pF		
Operating and storage temperature range	Тј Тѕтс	-65 to +150							°C	

Notes: 1.Test conditions:IF=0.5A,IR=1.0A,Irr=0.25A.

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





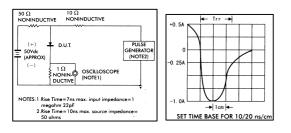
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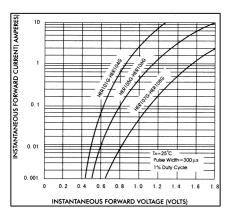
Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0Amperes

RATINGS AND CHARACTERISTIC CURVES HER101G THRU HER108G

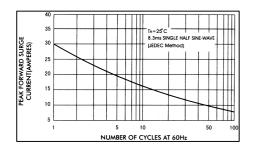
# FLG.1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



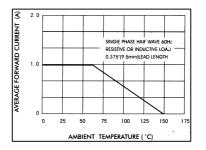
### FIG.3-TYPICAL FORWARD CHARATERISTICS



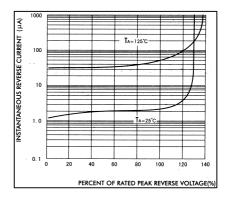
### FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



### FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE



### FIG.4-TYPICAL REVERSE CHARACTERISTICS



### FIG.6-TYPICAL JUNCTION CAPACITANCE

