# **HER101G THRU HER108G**

# ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 50 TO 1000V CURRENT: 1.0A



#### **FEATURE**

Low power loss High surge capability Glass passivated chip junction Ultra-fast recovery time for high efficiency High temperature soldering guaranteed 250°C/10sec/0.375″ lead length at 5 lbs tension

#### **MECHANICAL DATA**

Terminal: Plated axial leads solderable per

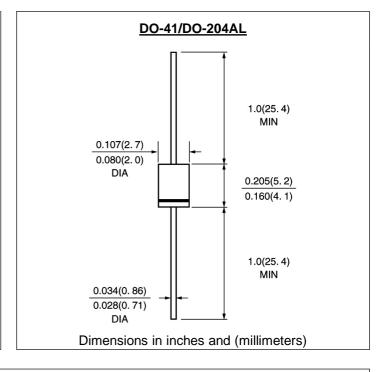
MIL-STD 202E, method 208C

Case: Molded with UL-94 Class V-0 recognized Flame

Retardant Epoxy

Polarity: color band denotes cathode

Mounting position: any



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	HER 101G	HER 102G	HER 103G	HER 104G	HER 105G	HER 106G	HER 107G	HER 108G	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	210	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =65°C	If(av)	1.0								А
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30							А	
Maximum Forward Voltage at Forward current 1.0A Peak	Vf	1.0					1.7			V
Maximum DC Reverse Current Ta =25 $^{\circ}$ C at rated DC blocking voltage Ta =125 $^{\circ}$ C	lr	10.0 100.0							μ <b>Α</b> μ <b>Α</b>	
Maximum Reverse Recovery Time (Note 1)	Trr	50				75			nS	
Typical Junction Capacitance (Note 2)	Cj	20				15			pF	
Typical Thermal Resistance (Note 3)	Rth(ja) Rth(jl)	68 18							°C/V	
Storage and Operating Junction Temperature	Tstg,Tj	-55 to +150							°C	

## Note:

- 1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- 3. Thermal Resistance from Junction to Ambient at 3/8 " lead length, P.C. Board Mounted

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FIG.1- MAXIMUM FORWARD

CURRENT DERATING CURVE

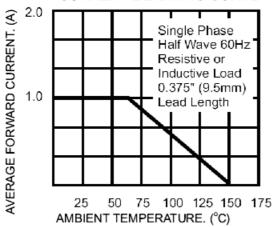


FIG.2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

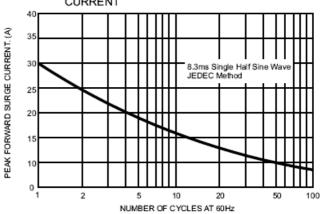


FIG.3- TYPICAL FORWARD CHARACTERISTICS

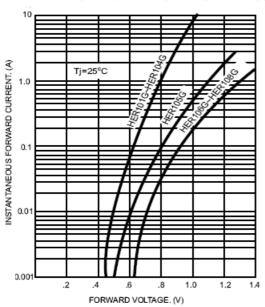


FIG.4- TYPICAL REVERSE CHARACTERISTICS

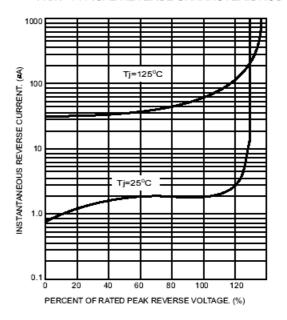
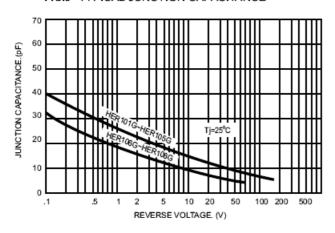


FIG.5- TYPICAL JUNCTION CAPACITANCE



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