

HER101G thru HER108G

HIGH EFFICIENCY GLASS PASSIVATED RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts FORWARD CURRENT - 1.0 Ampere

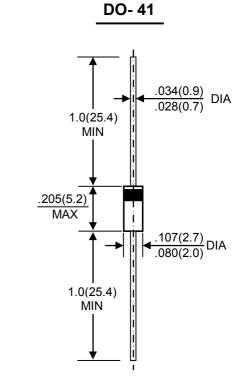
FEATURES

- Low cost
- Diffused junction
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA ● Case: JEDEC DO-41 molded plastic ● Polarity: Color band denotes cathode

•Mounting position: Any

●Weight: 0.012 ounces, 0.34 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	HER 101G	HER 102G	HER 103G	HER 104G	HER 105G	HER 106G	HER 107G	HER 108G	UNIT
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 @Ta=55 ℃	I(AV)	1.0								Α
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	IFSM	30								Α
Peak Forward Voltage at 1.0A DC	VF	1.0 1.3					1.7		V	
Maximum DC Reverse Current @TJ=25℃ at Rated DC Blocking Voltage @TJ=100℃	lR	5.0 100							μΑ	
Maximum Reverse Recovery Time(Note 1)	Trr	50 75						nS		
Typical Junction Capacitance (Note2)	СJ	20 10							pF	
Typical Thermal Resistance (Note3)	RөJA	25							°C/W	
Operating Temperature Range	TJ	-55 to +150								°C
Storage Temperature Range	Тѕтс	-55 to +150							$^{\circ}$	

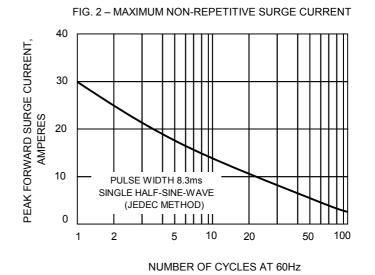
NOTES: 1.Measured with IF=0.5A,IR=1A,IRR=0.25A.

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

3. Thermal resistance junction to ambient.



FIG. 1 - FORWARD CURRENT DERATING CURVE 1.0 AVERAGE FORWARD CURRENT 0.8 0.6 AMPERES 0.4 SINGLE PHASE HALF WAVE 60Hz 0.2 RESISTIVE OR INDUCTIVE LOAD 0 25 50 75 100 125 150 175 AMBIENT TEMPERATURE (℃)



100
HER101G - HER105G
HER106G - HER108G

TJ = 25°C
f = 1 MHz

1
1
4
10
100

REVERSE VOLTAGE, VOLTS

FIG.3 - TYPICAL JUNCTION CAPACITANCE

