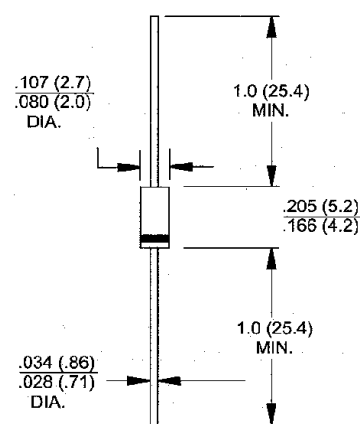


<b>HER101 THRU HER108</b>	
<b>1.0 AMP. High Efficient Rectifiers</b>	
<p><b>Features</b></p> <ul style="list-style-type: none"> <li>Low forward voltage drop</li> <li>High current capability</li> <li>High reliability</li> <li>High surge current capability</li> </ul> <p><b>Mechanical Data</b></p> <ul style="list-style-type: none"> <li>Cases: Molded plastic DO-41</li> <li>Epoxy: UL 94V-O rate flame retardant</li> <li>Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed</li> <li>Polarity: Color band denotes cathode end</li> <li>High temperature soldering guaranteed: 250°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension</li> <li>Weight: 0.34gram</li> </ul>	<div style="text-align: center; background-color: #cccccc; padding: 5px;">           Voltage Range 50 to 1000 Volts Current 1.0 Ampere         </div> <div style="text-align: center; padding: 10px;"> <p><b>DO-41</b></p>  <p style="text-align: center;">Dimensions in inches and (millimeters)</p> </div>

**Maximum Ratings and Electrical Characteristics**

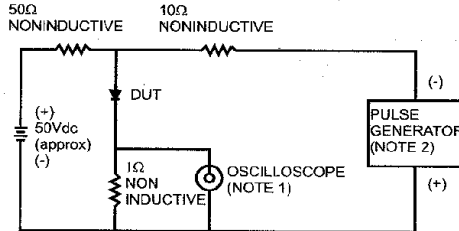
Rating at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%

Symbols	HER 101	HER 102	HER 103	HER 104	HER 105	HER 106	HER 107	HER 108	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	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 .375 (9.5mm) Lead Length @ T <sub>A</sub> = 55°C	1.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	30								A
Maximum Instantaneous Forward Voltage @ 1.0A	1.0		1.3		1.7				V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C at Rated DC Blocking Voltage @ T <sub>A</sub> =100°C	5.0								uA
	100								uA
Maximum Reverse Recovery Time ( Note 1 )	50				75				nS
Typical Junction Capacitance ( Note 2 )	20				15				pF
Operating Temperature Range T <sub>J</sub>	-65 to +125								°C
Storage Temperature Range T <sub>STG</sub>	-65 to +150								°C

Notes: 1. Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A  
 2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

## RATINGS AND CHARACTERISTIC CURVES (HER101 THRU HER108)

FIG. 1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance=1 megohm 22pf  
2. Rise Time=10ns max. Source Impedance=50 ohms

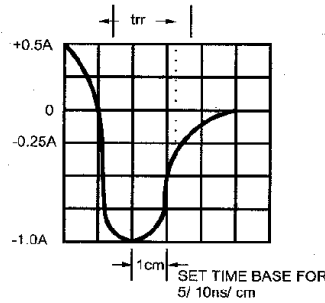


FIG. 2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

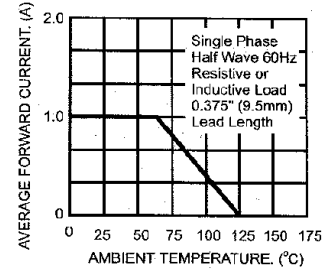


FIG. 3- TYPICAL REVERSE CHARACTERISTICS

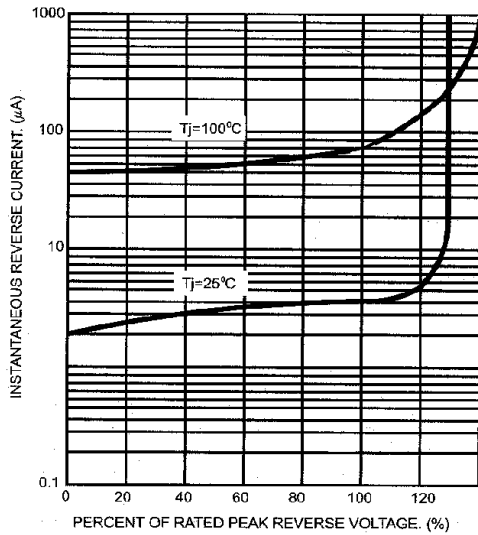


FIG. 4- TYPICAL FORWARD CHARACTERISTICS

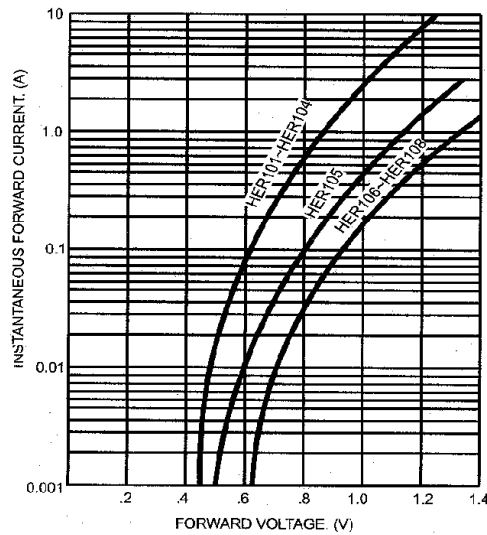


FIG. 5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

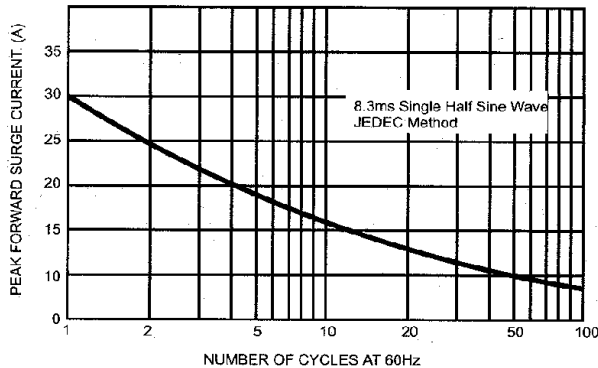


FIG. 6- TYPICAL JUNCTION CAPACITANCE

