

### **Features**

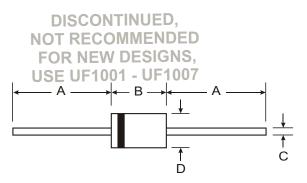
Low Leakage Low Forward Voltage Drop High Current Capability High Speed Switching Plastic Material: UL Flammability Classification Rating 94V-0

## **Mechanical Data**

Case: DO-41, Molded Plastic Terminals: Plated Axial Leads, Solderable per MIL-STD-202, Method 208 Polarity: Color Band Denotes Cathode Mounting Position: Any Weight: 0.35 grams (approx.)

# HER101 - HER106

# **1.0A HIGH EFFICIENCY RECTIFIER**



DO-41							
Dim	Min	Мах					
Α	25.4	—					
В	4.1	5.2					
С	0.71	0.86					
D	2.0	2.7					
All Dimensions in mm							

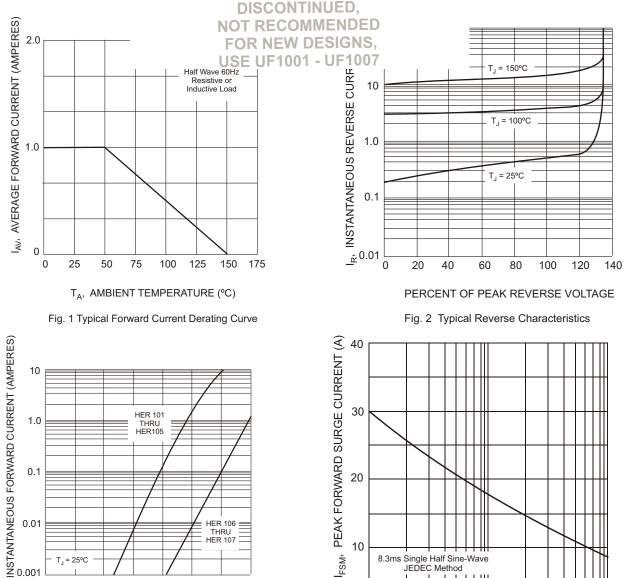
# **Maximum Ratings and Electrical Characteristics**

Ratings at 25 C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.

Characteristic	Symbol	HER 101	HER 102	HER 103	HER 104	HER 105	HER 106	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	420	V
Maximum DC Blocking voltage	V <sub>DC</sub>	50	100	200	300	400	600	V
Maximum Average Forward Rectified Current 9.5mm Lead Length $@$ T <sub>A</sub> = 50 C	I <sub>(AV)</sub>	1.0					Α	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FM</sub>	30					А	
Maximum Instantaneous Forward Voltage @ 1.0A DC	VF	1.1 1.75					1.75	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	5.0					Α	
$\begin{array}{llllllllllllllllllllllllllllllllllll$	I <sub>R</sub>	100					Α	
Maximum Reverse Recovery Time (Note 1)	t <sub>rr</sub>			50			100	ns
Typical Junction Capacitance (Note 2)	Cj			2	0			pF
Operating and Storage Temperature Range	$T_j, T_{STG}$			-65 to	+150			С

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 1.0MHz and applied reverse voltage of 4.0V.





30

20

10

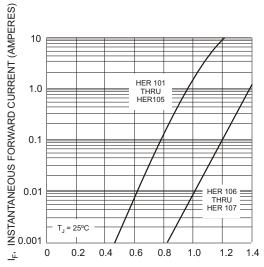
1

8.3ms Single Half Sine-Wave JEDEC Method .

10

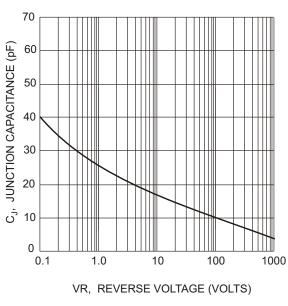
NUMBER OF CYCLES AT 60 Hz

Fig. 4 Max Non-Repetitive Peak Fwd Surge Current (A)



V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (VOLTS)

Fig. 3 Typical Instantaneous Forward Characteristics





100



#### IMPORTANT NOTICE

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. Diodes Incorporated does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

#### LIFE SUPPORT

Diodes Incorporated products are not authorized for use as critical components in life support devices or systems without the expressed written approval of the President of Diodes Incorporated.

DISCONTINUED, NOT RECOMMENDED FOR NEW DESIGNS, USE UF1001 - UF1007