

# HER201 – HER208

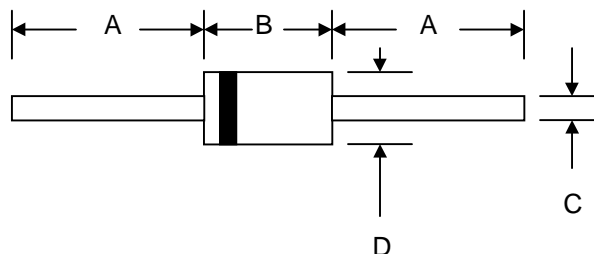
## 2.0A HIGH EFFICIENCY RECTIFIER

### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.40 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-15		
Dim	Min	Max
A	25.4	—
B	5.50	7.62
C	0.71	0.864
D	2.60	3.60
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

Characteristic	Symbol	HER 201	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	HER 208	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	300	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	210	280	420	560	700	V
Average Rectified Output Current (Note 1) @T <sub>A</sub> = 55°C	I <sub>O</sub>	2.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	60								A
Forward Voltage @I <sub>F</sub> = 2.0A	V <sub>FM</sub>	1.0				1.3	1.7			V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	I <sub>RM</sub>	5.0 100								μA
Reverse Recovery Time (Note 2)	t <sub>rr</sub>	50					75			nS
Typical Junction Capacitance (Note 3)	C <sub>j</sub>	60					40			pF
Operating Temperature Range	T <sub>j</sub>	-65 to +125								°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150								°C

**\*Glass passivated forms are available upon request**

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case  
 2. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, IRR = 0.25A. See figure 5.  
 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

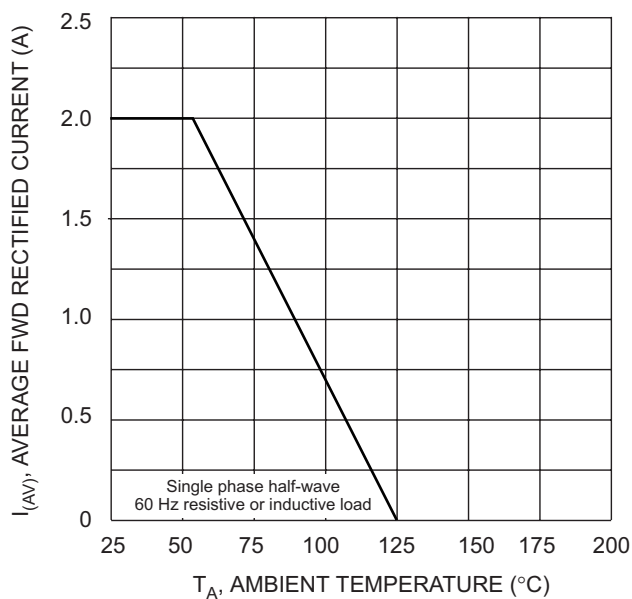


Fig. 1 Forward Current Derating Curve

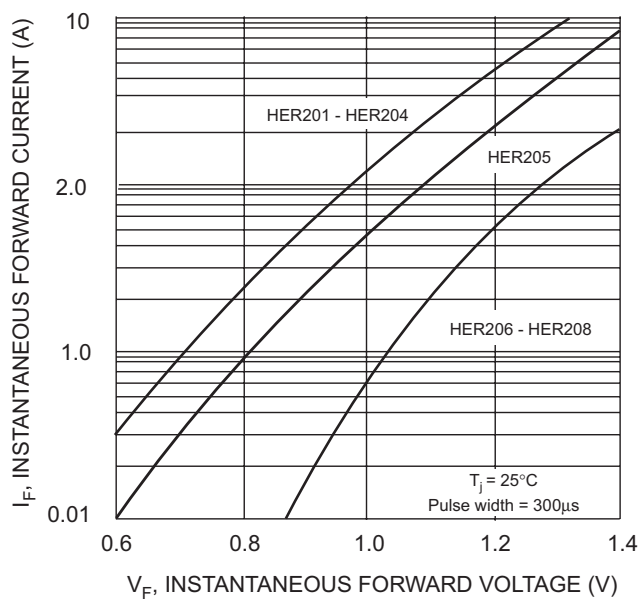


Fig. 2 Typical Forward Characteristics

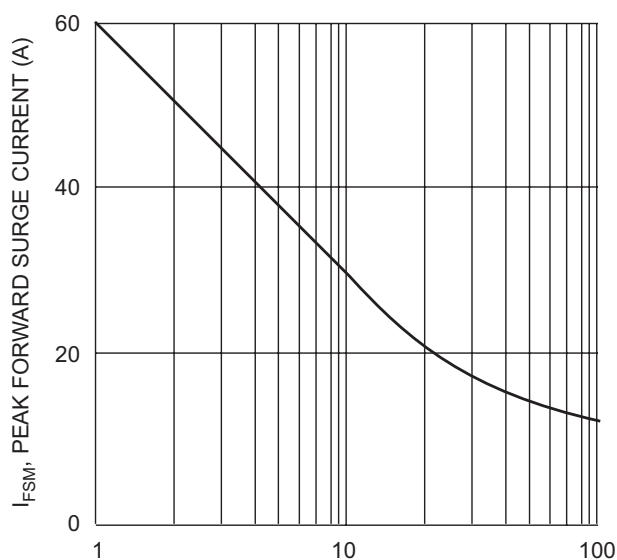


Fig. 3 Peak Forward Surge Current

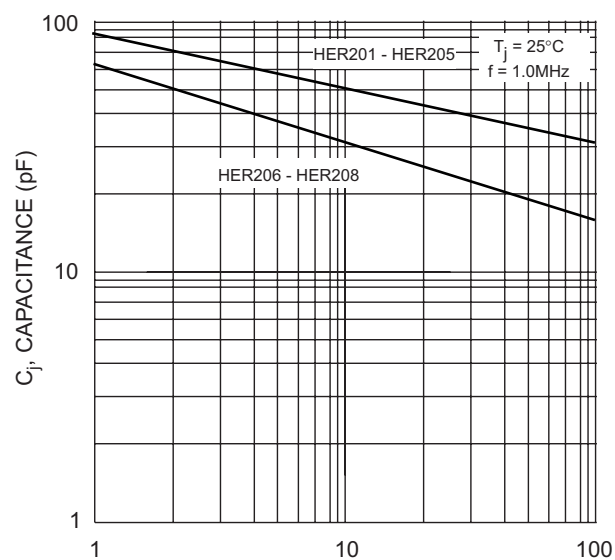
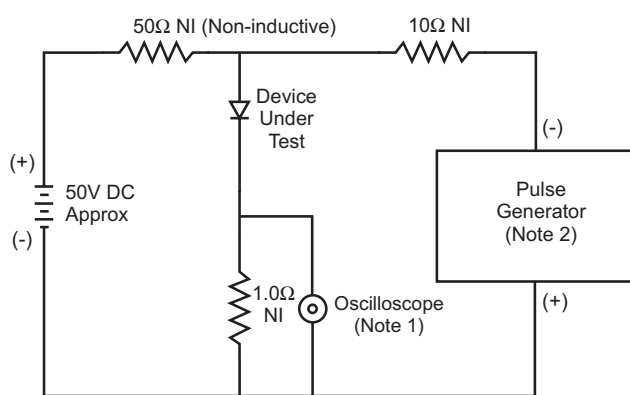


Fig. 4 Typical Junction Capacitance



Notes:

1. Rise Time = 7.0ns max. Input Impedance = 1.0M $\Omega$ , 22pF.
2. Rise Time = 10ns max. Input Impedance = 50 $\Omega$ .

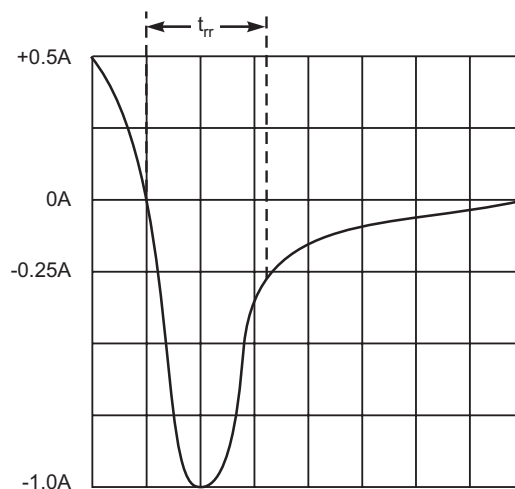


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

## ORDERING INFORMATION

Product No.♦	Package Type	Shipping Quantity
HER201-T3	DO-15	4000/Tape & Reel
<b>HER201-TB</b>	DO-15	3000/Tape & Box
HER201	DO-15	1000 Units/Box
HER202-T3	DO-15	4000/Tape & Reel
<b>HER202-TB</b>	DO-15	3000/Tape & Box
HER202	DO-15	1000 Units/Box
HER203-T3	DO-15	4000/Tape & Reel
<b>HER203-TB</b>	DO-15	3000/Tape & Box
HER203	DO-15	1000 Units/Box
HER204-T3	DO-15	4000/Tape & Reel
<b>HER204-TB</b>	DO-15	3000/Tape & Box
HER204	DO-15	1000 Units/Box
HER205-T3	DO-15	4000/Tape & Reel
<b>HER205-TB</b>	DO-15	3000/Tape & Box
HER205	DO-15	1000 Units/Box
HER206-T3	DO-15	4000/Tape & Reel
<b>HER206-TB</b>	DO-15	3000/Tape & Box
HER206	DO-15	1000 Units/Box
HER207-T3	DO-15	4000/Tape & Reel
<b>HER207-TB</b>	DO-15	3000/Tape & Box
HER207	DO-15	1000 Units/Box
HER208-T3	DO-15	4000/Tape & Reel
<b>HER208-TB</b>	DO-15	3000/Tape & Box
HER208	DO-15	1000 Units/Box

Products listed in **bold** are WTE **Preferred** devices.

♦T3 suffix refers to a 13" reel. TB suffix refers to Ammo Pack.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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**WARNING:** DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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