

# HER201 thru HER208

Glass Passivated Ultrafast Rectifiers  
 Reverse Voltage 50V to 1000V Forward Current 2.0A

## Features

- Low leakage current
- Low forward voltage drop
- Glass passivated chip junction
- For general purpose applications
- Moisture sensitivity: Level 1, per J-STD-020
- For fast switching and low logic level applications
- High temperature soldering guaranteed: 260°C/10 seconds



DO-15 (DO-204AC)

## Applications

Small battery charger, power supplies

## Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	HER 201	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	HER 208	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	2								A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load Per Diode	I <sub>FSM</sub>	60								A
Typical Thermal Resistance, Junction to Ambient <sup>1</sup>	R <sub>θJA</sub>	69								°C/W
Typical Thermal Resistance, Junction to Case <sup>1</sup>	R <sub>θJC</sub>	37								°C/W
Typical Thermal Resistance, Junction to Lead <sup>1</sup>	R <sub>θJL</sub>	28								°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +135								°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150								°C

## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Conditions	HER 201	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	HER 208	Unit
Forward Drop Voltage	V <sub>F</sub>	I <sub>F</sub> =2A	1.0		1.3		1.7				V
Reverse Leakage Current @ V <sub>R</sub>	I <sub>R</sub>	T <sub>J</sub> =25°C	5								uA
		T <sub>J</sub> =125°C	100								
Typical Junction Capacitance	C <sub>J</sub>	4.0V, 1MHz	50				30				pF
Maximum Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>RR</sub> =0.25A	50				75				nS

Note:

1. Valid provided that leads at a distance of 9.5mm from case are kept at ambient temperature.

## Ratings and Characteristic Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

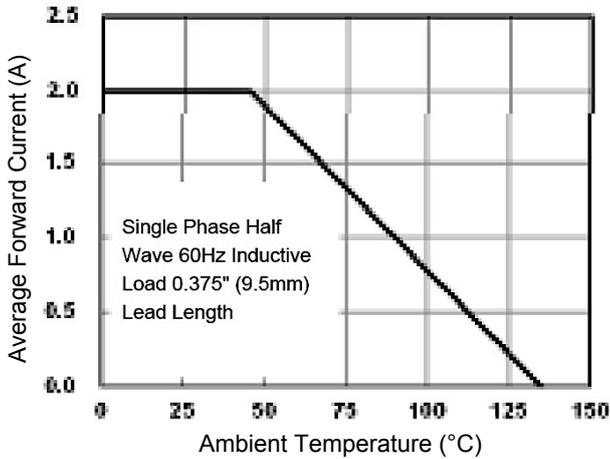


Figure 1. Maximum Forward Current Derating Curve

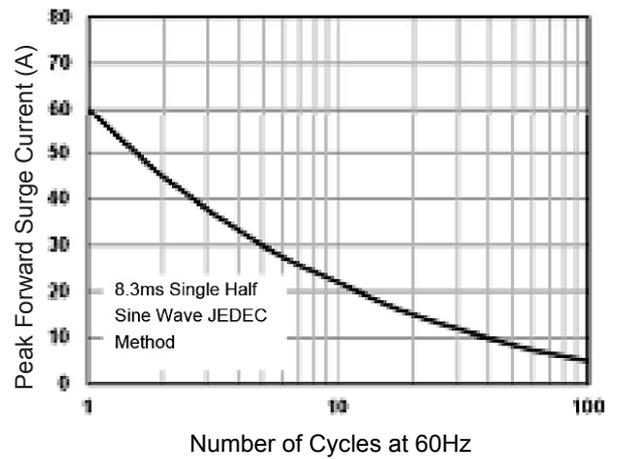


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

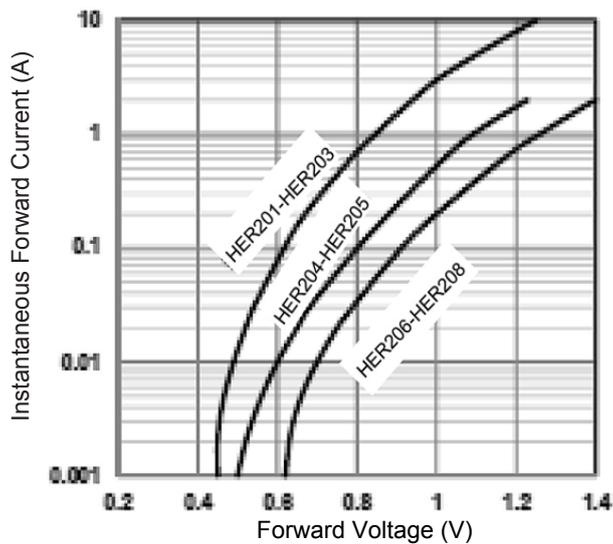


Figure 3. Typical Forward Characteristics

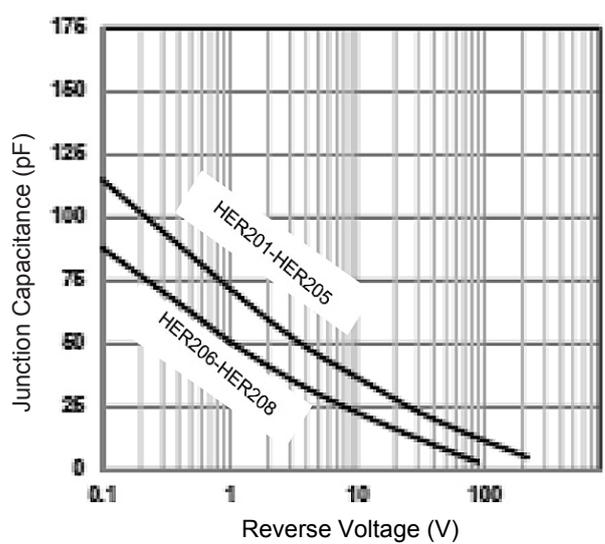


Figure 4. Typical Junction Capacitance

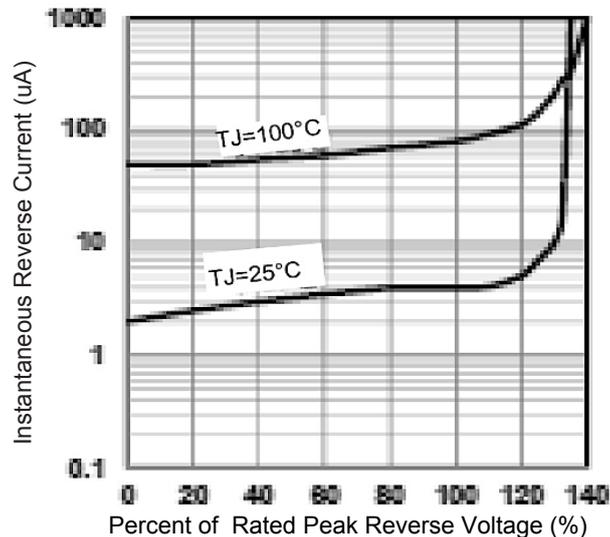
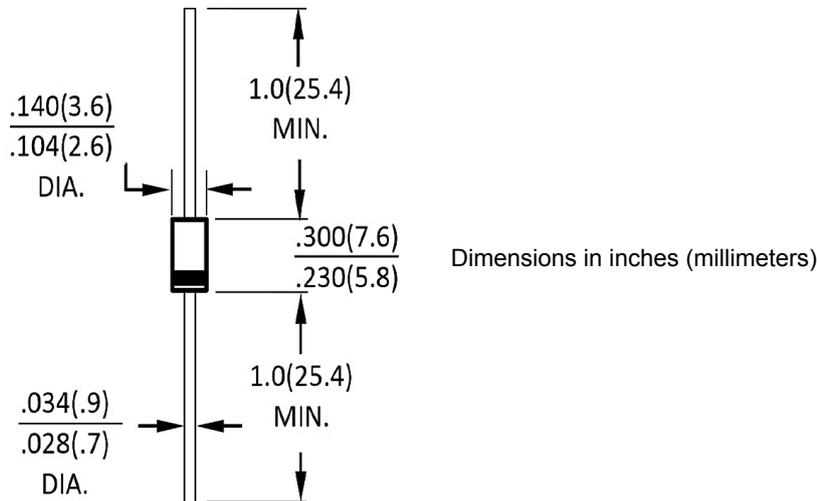


Figure 5. Typical Reverse Characteristics

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## Package Outline Dimensions DO-15 (DO-204AC)



## Order Information

Device	Package	Marking	Carrier	Quantity
HER201	DO-15 (DO-204AC)	HER201	Tape & Reel	4,000 Pcs / Reel
HER202	DO-15 (DO-204AC)	HER202	Tape & Reel	4,000 Pcs / Reel
HER203	DO-15 (DO-204AC)	HER203	Tape & Reel	4,000 Pcs / Reel
HER204	DO-15 (DO-204AC)	HER204	Tape & Reel	4,000 Pcs / Reel
HER205	DO-15 (DO-204AC)	HER205	Tape & Reel	4,000 Pcs / Reel
HER206	DO-15 (DO-204AC)	HER206	Tape & Reel	4,000 Pcs / Reel
HER207	DO-15 (DO-204AC)	HER207	Tape & Reel	4,000 Pcs / Reel
HER208	DO-15 (DO-204AC)	HER208	Tape & Reel	4,000 Pcs / Reel

For more information, please contact us at: [inquiry@goodarksemi.com](mailto:inquiry@goodarksemi.com)