

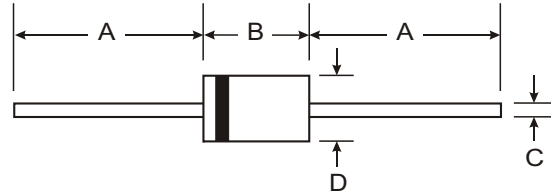
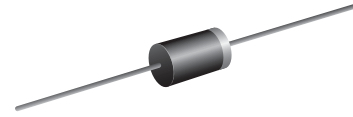
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 3.0 A**

### Features

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

### Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-201AD		
Dim	Min	Max
A	25.40	—
B	8.50	9.53
C	0.96	1.06
D	4.80	5.21
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%.

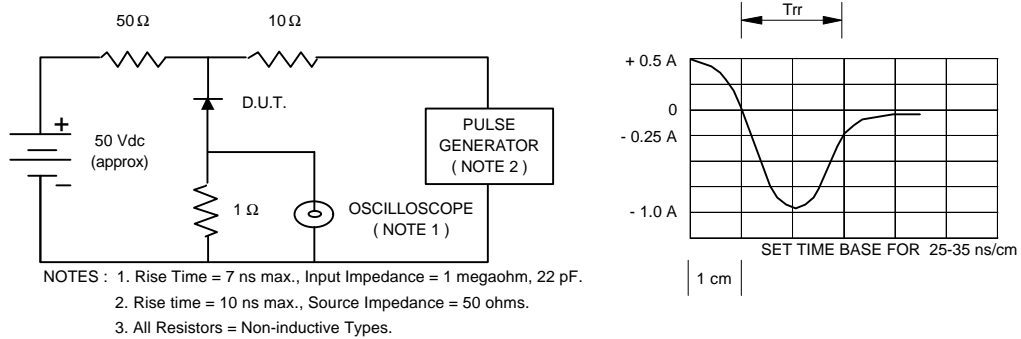
RATING	SYMBOL	HER 301	HER 302	HER 303	HER 304	HER 305	HER 306	HER 307	HER 308	UNIT	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Current 0.375"(9.5mm) Lead Length      T <sub>a</sub> = 55 °C	I <sub>F(AV)</sub>	3.0								A	
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150								A	
Maximum Forward Voltage at I <sub>F</sub> = 3.0 A	V <sub>F</sub>	1.1					1.7				V
Maximum DC Reverse Current      T <sub>a</sub> = 25 °C at Rated DC Blocking Voltage      T <sub>a</sub> = 100 °C	I <sub>R</sub>	10								μA	
	I <sub>R(H)</sub>	50								μA	
Maximum Reverse Recovery Time ( Note 1 )	T <sub>rr</sub>	50					75				ns
Typical Junction Capacitance ( Note 2 )	C <sub>J</sub>	50								pf	
Junction Temperature Range	T <sub>J</sub>	- 65 to + 150								°C	
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 150								°C	

#### Notes :

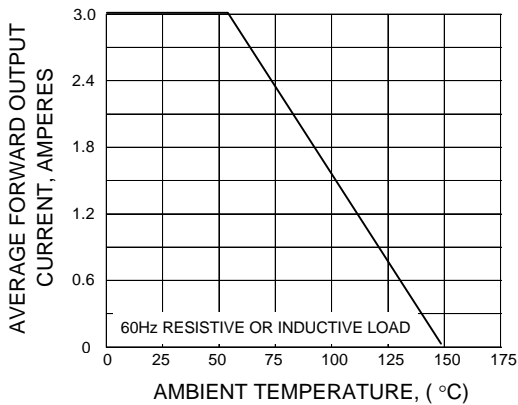
- ( 1 ) Reverse Recovery Test Conditions : I<sub>F</sub> = 0.5 A, I<sub>R</sub> = 1.0 A, I<sub>rr</sub> = 0.25 A.
- ( 2 ) Measured at 1.0 MHz and applied reverse voltage of 4.0 V<sub>dc</sub>

## RATING AND CHARACTERISTIC CURVES ( HER301 - HER308 )

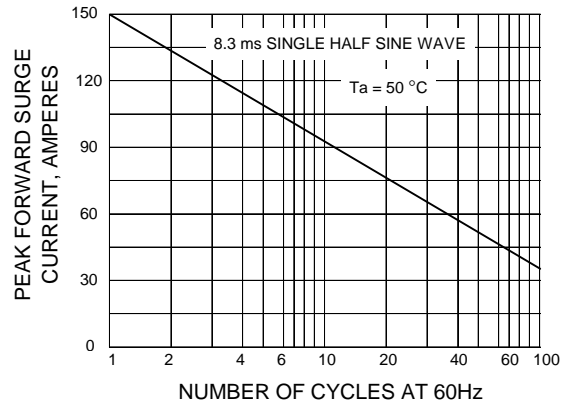
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



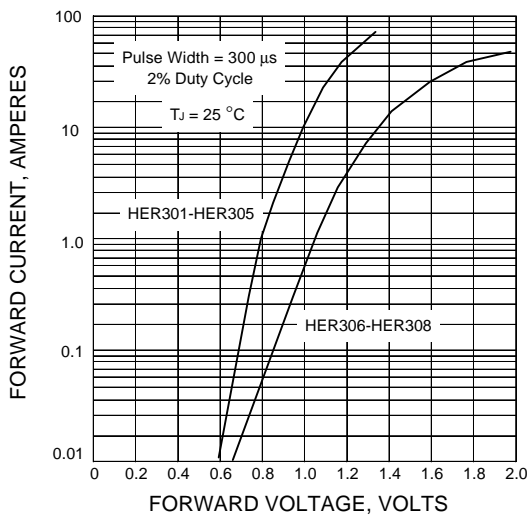
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

