

## FEATURES:

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- High speed switching

## MECHANICAL DATA

Case : Molded plastic

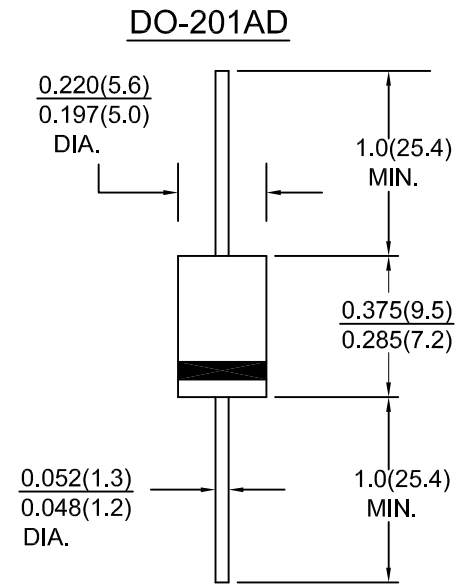
Epoxy: UL 94V-0 rate flame retardant

Lead : Axial leads, solderable per MIL-STD-202,  
Method 208 guaranteed

Polarity : Color band on body denotes cathode end

Mounting Position : Any

Weight : 1.10 grams



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.

Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	HER	HER	HER	HER	HER	HER	HER	HER	Units	
		501	502	503	504	505	506	507	508		
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	Volts	
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	Volts	
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	Volts	
Maximum average forward rectified current .375"(9.5mm) lead length at Ta=50° C	I <sub>O</sub>	5.0								Amps	
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I <sub>FSM</sub>	200								Amps	
Maximum instantaneous forward voltage at 5.0 A	V <sub>F</sub>	1.0		1.30		1.7				Volts	
Maximum DC reverse current Ta=25° C at rated DC blocking voltage Ta=100° C	I <sub>R</sub>	10.0 200								μ A	
Maximum reverse recovery time (note 1)	trr	50					75				nS
Typical junction capacitance (note 2)	C <sub>j</sub>	75								pF	
Operating and storage temperature range	T <sub>j</sub> , T <sub>stg</sub>	-65 to +150								° C	

Notes : 1. Reverse recovery test condition : I<sub>F</sub>=0.5A ; I<sub>R</sub>=1.0A ; I<sub>RR</sub>=0.25A

2. Measured 1MHz and applied reverse voltage of 4.0V DC

# RATINGS AND CHARACTERISTIC CURVES HER501 THRU HER508

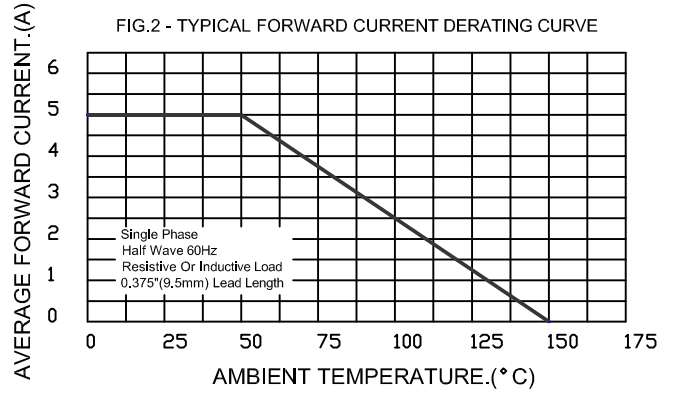
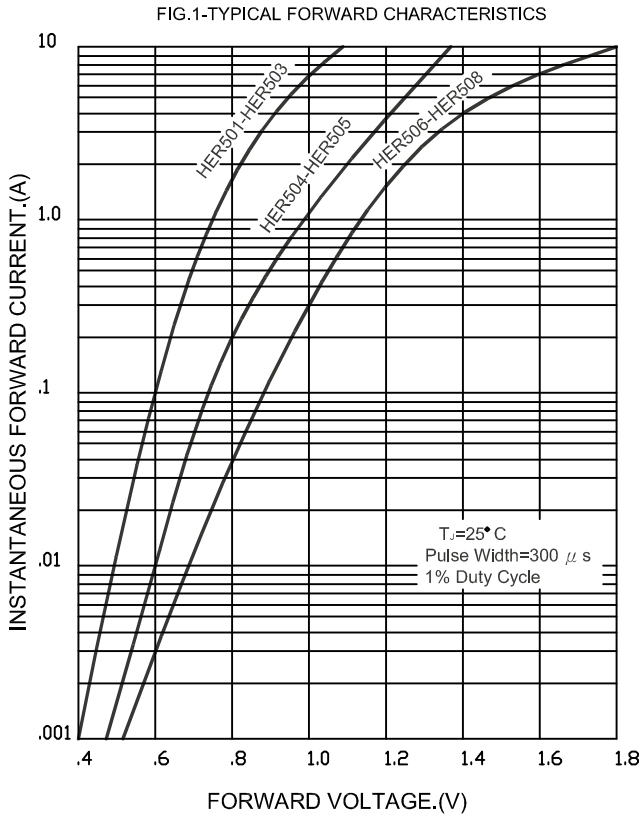
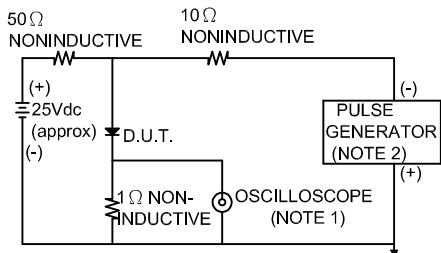


FIG.3-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

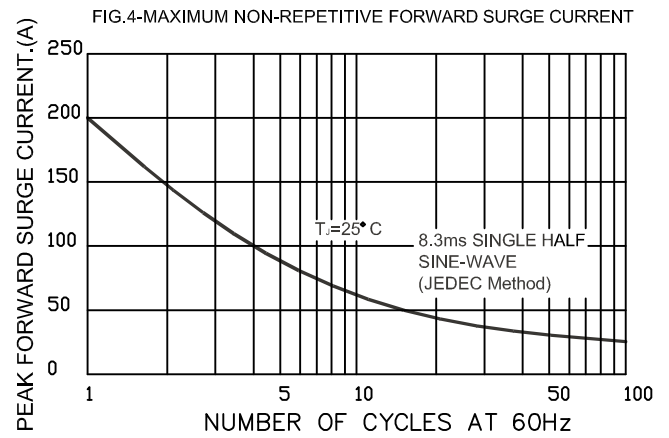
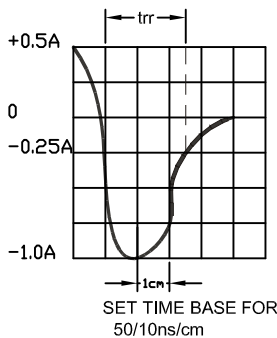


FIG.5-TYPICAL JUNCTION CAPACITANCE

