

CURRENT 5.0 Ampere  
 VOLTAGE RANG 50 to 1000 Volts

# HER501 THRU HER508

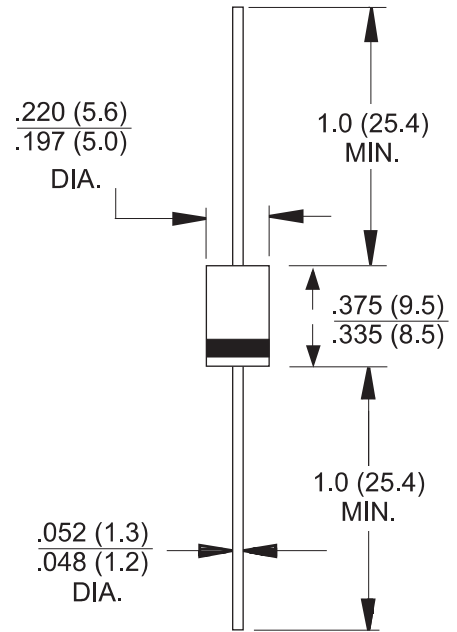
## FEATURES

- Low cost
- Diffused junction
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

## MECHANICAL DATA

- Case: JEDEC DO-27 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.04 ounces , 1.1 grams
- Mounting position: Any

### DO-27 / DO-201AD



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave ,60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	HER501	HER502	HER503	HER504	HER505	HER506	HER507	HER508	UNIT	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	560	700	V	
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current @TA =55 °C	I(AV)	5.0								A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	IFSM	200								A	
Peak Forward Voltage at 5.0A DC	VF	1.0			1.3		1.7			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ=25°C @TJ=100°C	IR	5.0					100				uA
Maximum Reverse Recovery Time (Note1)	TRR	50					75				nS
Typical Junction Capacitance (Note2)	CJ	75					50				pF
Typical Thermal Resistance (Note3)	R JA	20								°C/W	
Operating Temperature Range	TJ	-50 to +125								°C	
Storage Temperature Range	TSTG	-50 to +150								°C	

NOTES: 1.Measured with IF=0.5A, IR=1A , IRR=0.25A  
 2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC  
 3.Thermal resistance junction to ambient

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**RATING AND CHARACTERISTIC CURVES HER501 Thru HER508**

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

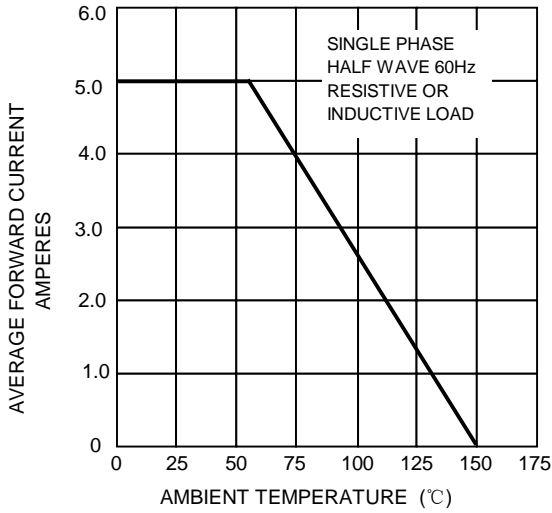


FIG. 2 – TYPICAL REVERSE CHARACTERISTICS

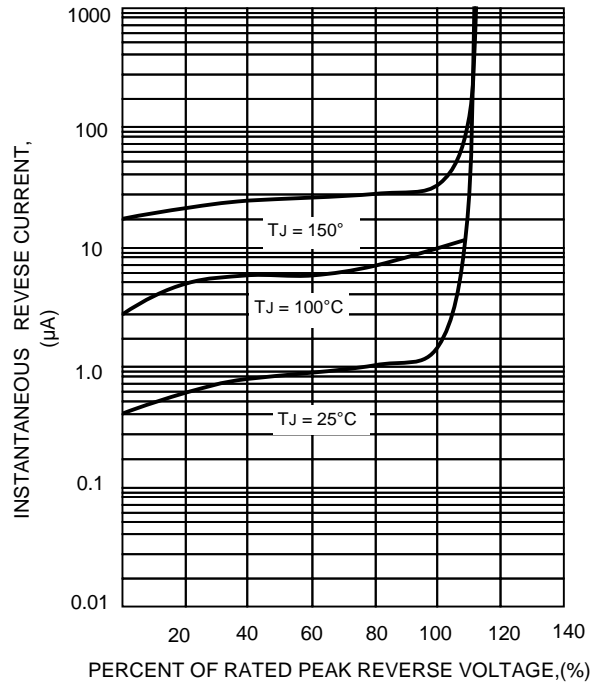


FIG. 4 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

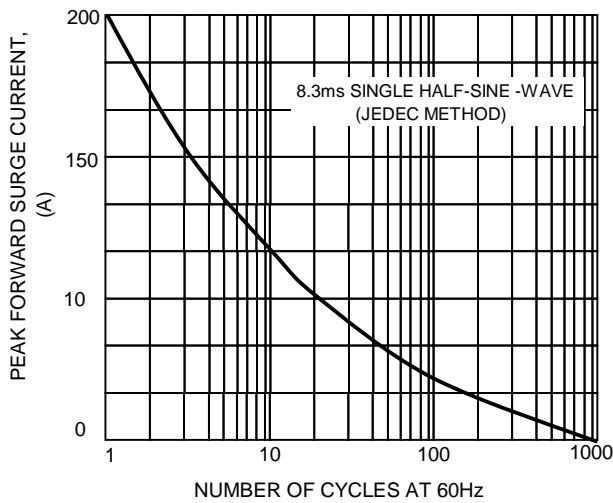


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

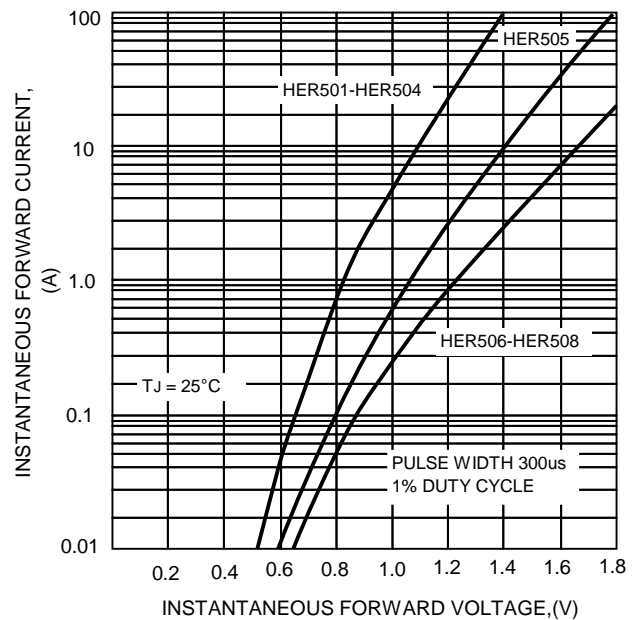


FIG. 5 – TYPICAL JUNCTION CAPACITANCE

