

## HER301G THRU HER308G

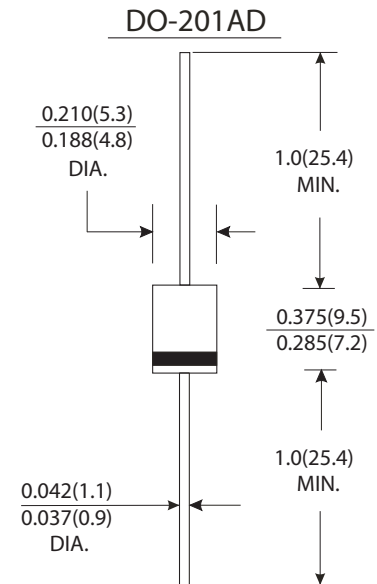
CURRENT 3.0 Amperes  
VOLTAGE 50 to 1000 Volts

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- High current capability
- High reliability
- Low power loss, high efficiency
- Glass passivated junction
- High speed switching
- Low leakage

### Mechanical Data

- Case : JEDEC DO-201AD molded plastic body
- Epoxy : UL94V-0 rate flame retardant
- Lead : Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.042 ounce, 1.19 gram



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

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

	Symbols	HER 301G	HER 302G	HER 303G	HER 304G	HER 305G	HER 306G	HER 307G	HER 308G	Units
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 0.375"(9.5mm) lead length @ TA=55 °C	I <sub>(AV)</sub>	3.0								Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	100								Amps
Maximum instantaneous forward voltage at 2.0A	V <sub>F</sub>	1.0		1.3		1.7			Volts	
Maximum DC reverse current at rated DC blocking voltage TA=25 °C	I <sub>R</sub>	10.0								μA
Maximum DC reverse current at rated DC blocking voltage TA=125 °C		200								
Maximum reverse recovery time (Note 1)	T <sub>rr</sub>	50				75				ns
Typical junction capacitance (Note 2)	C <sub>J</sub>	70				50				pF
Operating junction and storage temperature range	T <sub>J</sub> T <sub>STG</sub>	-65 to +150								°C

#### Notes:

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

## RATINGS AND CHARACTERISTIC CURVES HER301G THRU HER308G

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

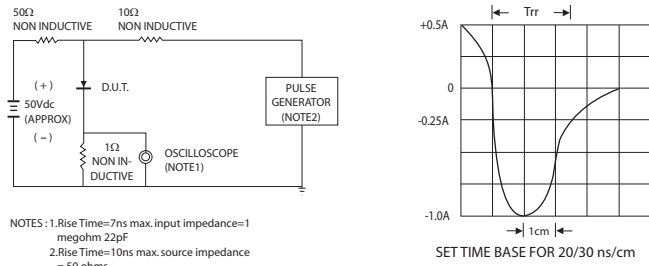


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

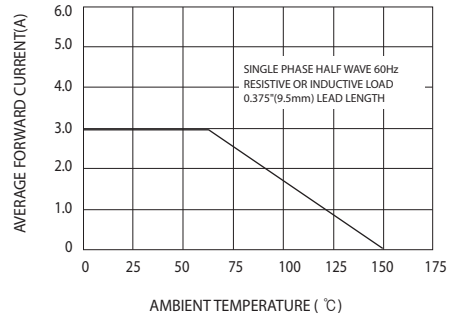


FIG.3-TYPICAL FORWARD CHARACTERISTICS

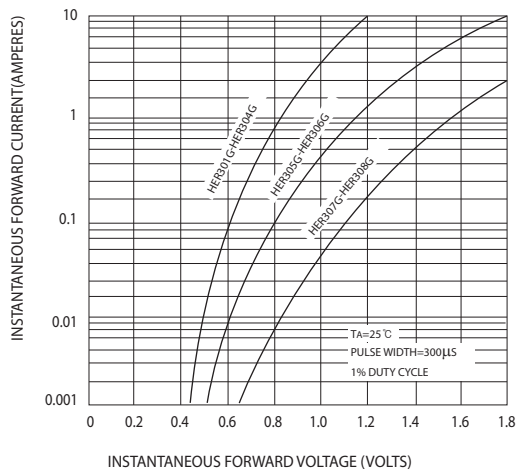


FIG.4-TYPICAL REVERSE CHARACTERISTICS

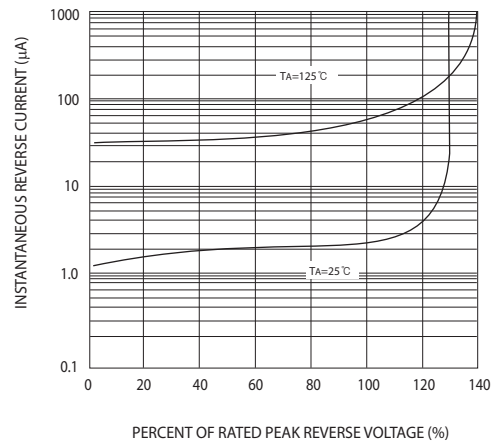


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

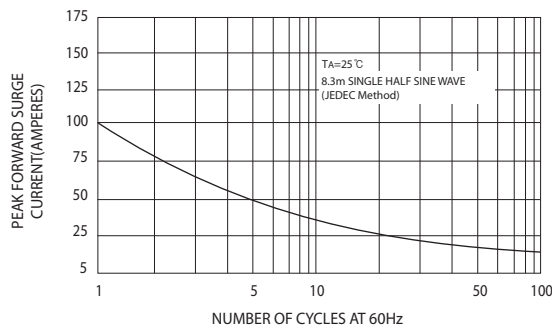


FIG.6-TYPICAL JUNCTION CAPACITANCE

