

FEATURES:

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

MECHANICAL DATA

Case : Molded plastic

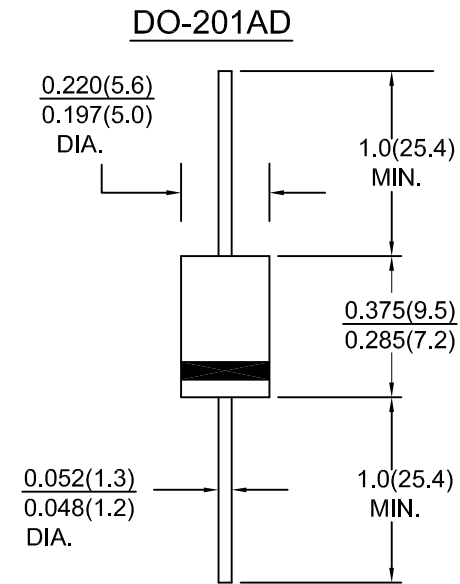
Epoxy: UL 94V-0 rate flame retardant

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 501G	HER 502G	HER 503G	HER 504G	HER 505G	HER 506G	HER 507G	HER 508G	Units
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	300	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	210	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	300	400	600	800	1000	Volts
Maximum average forward rectified current .375"(9.5mm) lead length at Ta=50° C	I _O	5.0								Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I _{FSM}	200								Amps
Maximum instantaneous forward voltage at 5.0 A	V _F	1.0		1.30		1.7			Volts	
Maximum DC reverse current Ta=25° C at rated DC blocking voltage Ta=125° C	I _R	10.0 200								μ A
Maximum reverse recovery time (note 1)	trr	50					75			nS
Typical junction capacitance (note 2)	C _j	75								pF
Operating and storage temperature range	T _j , T _{stg}	-65 to +150								° C

Notes : 1. Reverse recovery test condition : I_F=0.5A ; I_R=1.0A ; I_{RR}=0.25A

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

RATING AND CHARACTERISTIC CURVES HER501G THRU HER508G

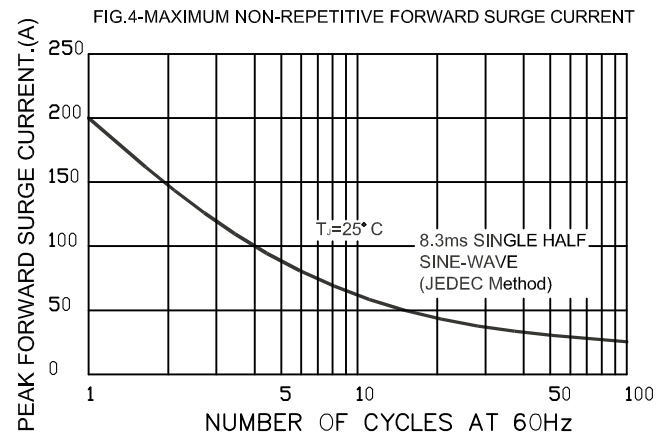
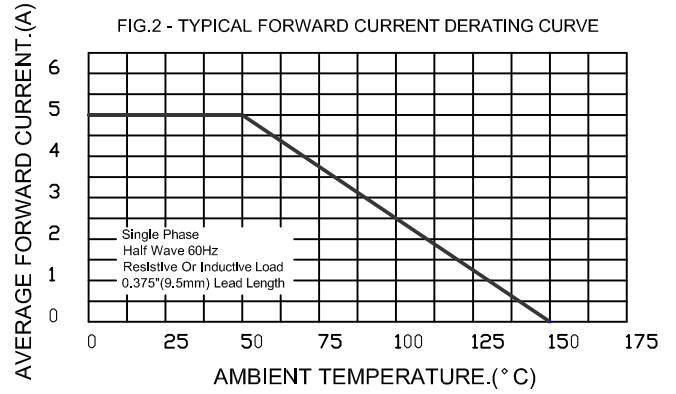
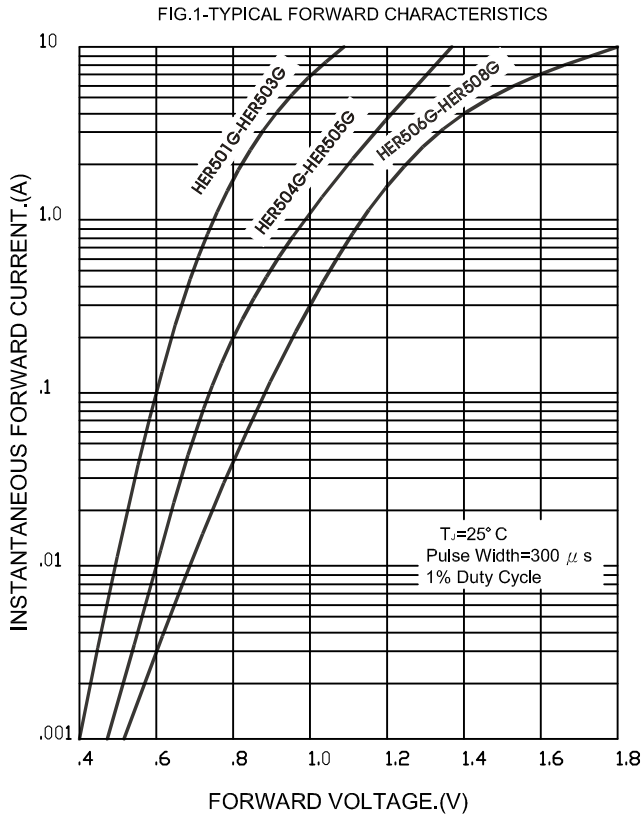
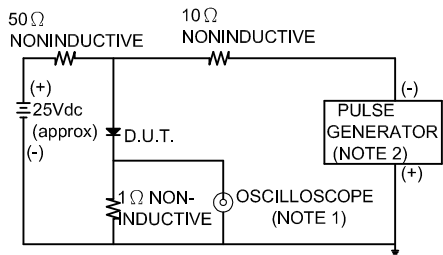


FIG.3-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

