

HER501 THRU HER508

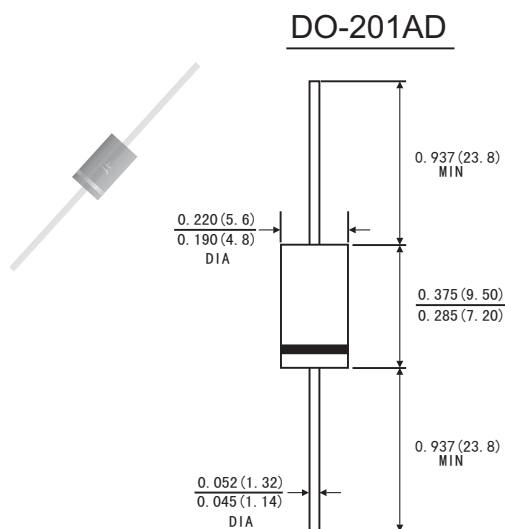
HIGH EFFICIENCY RECTIFIER
Reverse Voltage: 50 to 1000 Volts
Forward Current: 5.0 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- High current capability, High reliability
- Low power loss, high efficiency
- High surge current capability
- High speed switching, Low leakage
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

MECHANICAL DATA

- Case: JEDEC DO-201AD molded plastic body
- Lead: Plated axial leads, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.042 ounce, 1.19 grams



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%.)

		Symbols	HER 501	HER 502	HER 503	HER 504	HER 505	HER 506	HER 507	HER 508	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		I _(AV)	5.0								Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	170								Amps
Maximum Instantaneous Forward Voltage at 5.0 A		V _F	1.0		1.3		1.7			Volts	
Maximum DC Reverse Current at rated DC blocking voltage	T _A =25°C	I _R	10.0								μA
	T _A =100°C		200								
Maximum reverse recovery time(Note1)		T _{rr}	50				75			ns	
Typical junction capacitance(Note2)		C _J	75								PF
Operating junction and storage temperature range		T _J T _{STG}	-55 to +125 -55 to +150								°C

Note: 1. Test conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.

2. Measured at 1MHz and applied reverse voltage of 4.0 Volts.

RATINGS AND CHARACTERISTIC CURVES HER501 THRU HER508

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

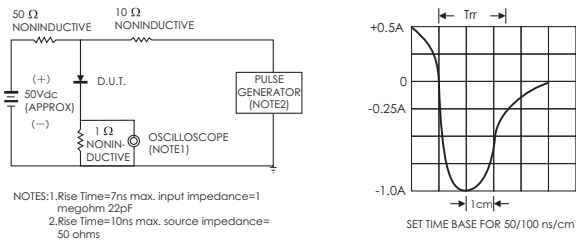


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

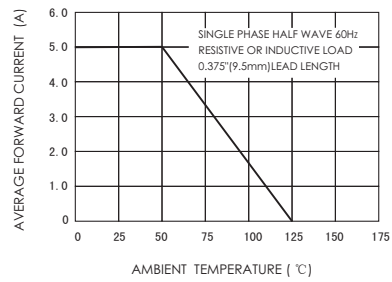


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

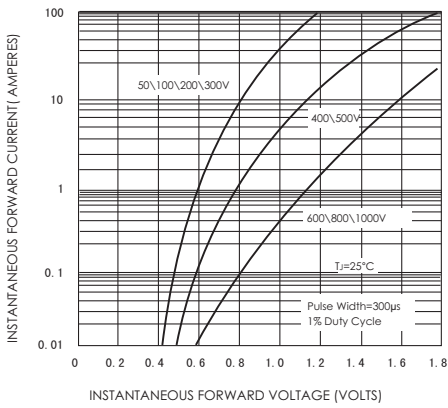


FIG.4-TYPICAL REVERSE CHARACTERISTICS

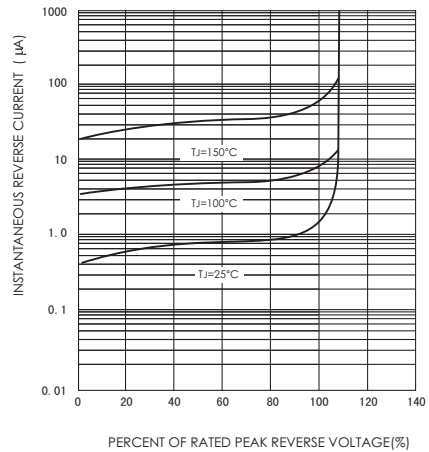


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

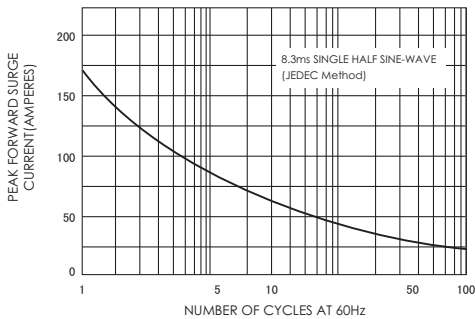


FIG.6-TYPICAL JUNCTION CAPACITANCE

