

HER501G THRU HER508G

GLASS PASSIVATED HIGH EFFICIENCY RECTIFIER

Reverse Voltage: 50 to 1000 Volts

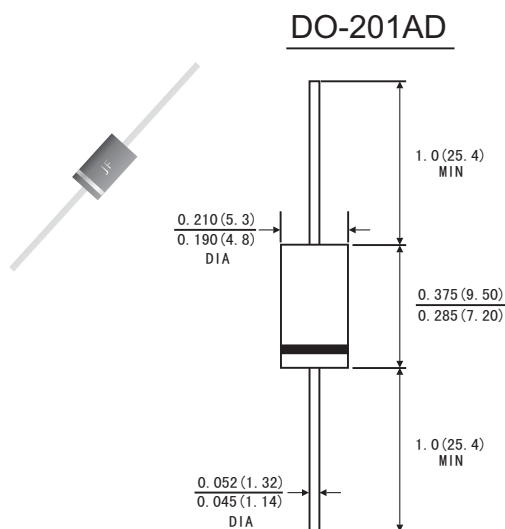
Forward Current: 5.0 Amperes

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 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 | 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 | 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 +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 HER501G THRU HER508G

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

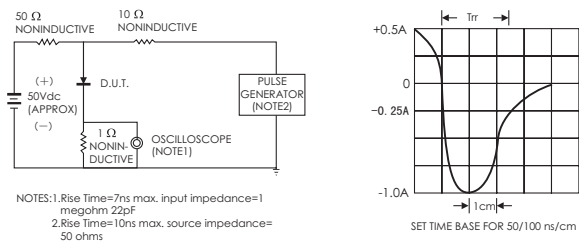


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

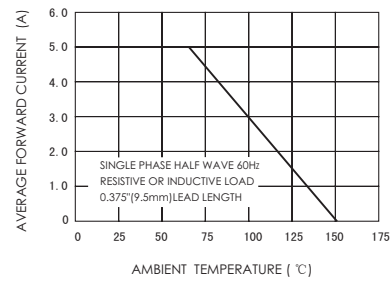


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

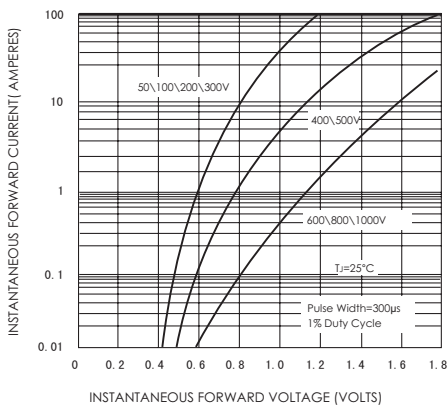


FIG.4-TYPICAL REVERSE CHARACTERISTICS

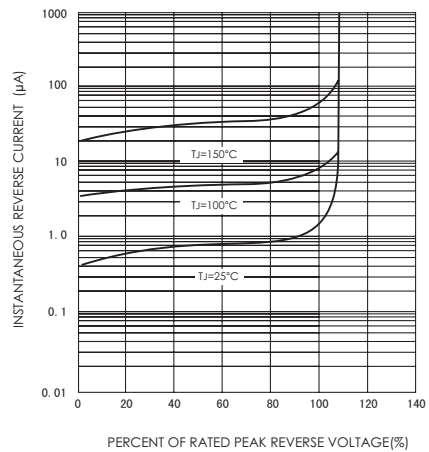


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

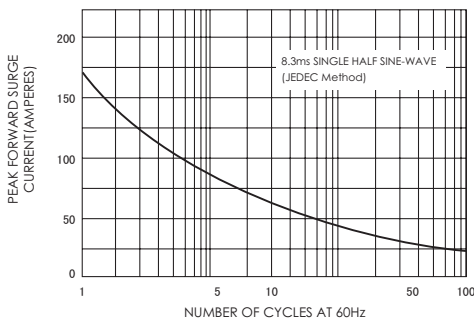


FIG.6-TYPICAL JUNCTION CAPACITANCE

