



Micro Commercial Components

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HER301 Thru HER308

Features

- Low forward voltage drop
- High surge current capability
- High reliability
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

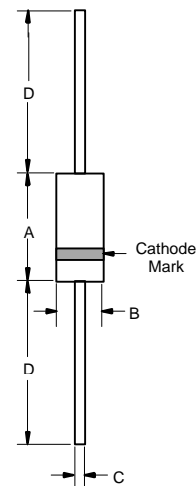
Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 30°C/W Junction To Lead

**3.0 Amp High
Efficient Rectifiers
50 to 1000 Volts**

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| HER301 | HER301 | 50V | 35V | 50V |
| HER302 | HER302 | 100V | 70V | 100V |
| HER303 | HER303 | 200V | 140V | 200V |
| HER304 | HER304 | 300V | 210V | 300V |
| HER305 | HER305 | 400V | 280V | 400V |
| HER306 | HER306 | 600V | 420V | 600V |
| HER307 | HER307 | 800V | 560V | 800V |
| HER308 | HER308 | 1000V | 700V | 1000V |

DO-201AD



Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|----------------------|---|
| Average Forward Current | $I_{F(AV)}$ | 3.0A | $T_A = 55^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 150A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage HER301-HER304 HER305 HER306-HER308 | V_F | 1.0V 1.3V 1.7V | $I_{FM} = 3.0A$; $T_A = 25^\circ\text{C}$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 10uA 200uA | $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$ |
| Maximum Reverse Recovery Time HER301-HER305 HER306-HER308 | T_{rr} | 50ns 75ns | $I_F=0.5A, I_R=1.0A$ $I_{RR}=0.25A$ |
| Typical Junction Capacitance HER301-HER305 HER306-HER308 | C_J | 80pF 50pF | Measured at 1.0MHz, $V_R=4.0V$ |

*Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|-------|------|------|
| | INCHES | | MM | | |
| A | .287 | .374 | 7.30 | 9.50 | |
| B | .189 | .208 | 4.80 | 5.30 | |
| C | .048 | .052 | 1.20 | 1.30 | |
| D | 1.000 | --- | 25.40 | --- | |

RATINGS AND CHARACTERISTIC CURVES

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

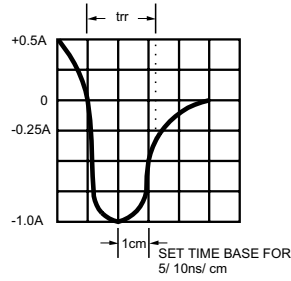
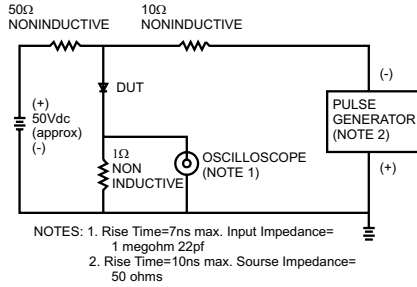


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

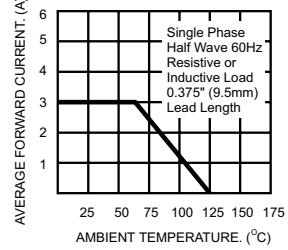


FIG.3- TYPICAL REVERSE CHARACTERISTICS

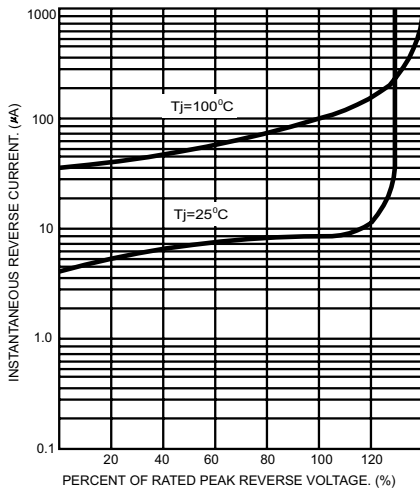


FIG.5- TYPICAL FORWARD CHARACTERISTICS

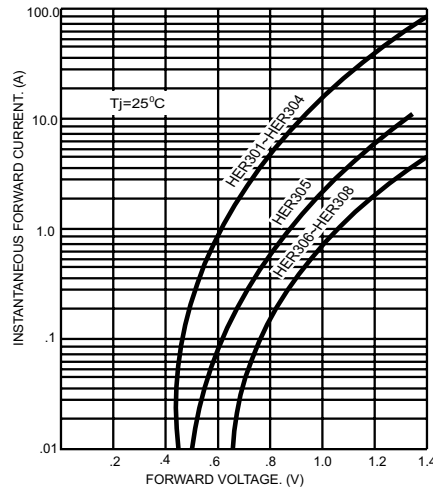


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

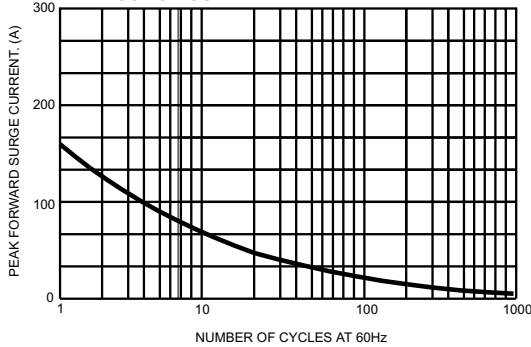
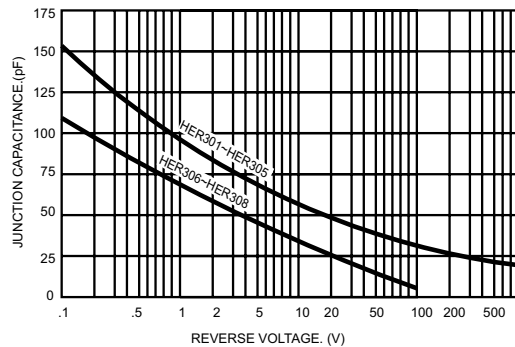


FIG.6- TYPICAL JUNCTION CAPACITANCE





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