



Micro Commercial Components
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HER101 THRU HER108

Features

- High Surge Current Capability
- High Reliability
- Low Forward Voltage Drop
- High Current Capability

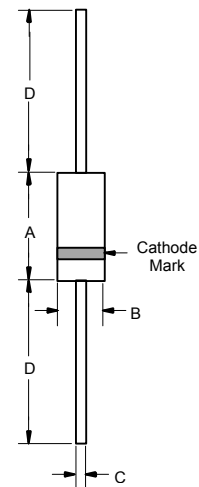
Maximum Ratings

Operating Temperature: -55°C to +125°C
 Storage Temperature: -55°C to +150°C
 For capacitive load, derate current by 20%

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| HER101 | --- | 50V | 35V | 50V |
| HER102 | --- | 100V | 70V | 100V |
| HER103 | --- | 200V | 140V | 200V |
| HER104 | --- | 300V | 210V | 300V |
| HER105 | --- | 400V | 280V | 400V |
| HER106 | --- | 600V | 420V | 600V |
| HER107 | --- | 800V | 560V | 800V |
| HER108 | --- | 1000V | 700V | 1000V |

1.0 Amp High Efficient Rectifiers 50 to 1000 Volts

DO-41



Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|----------------------|---|
| Average Forward Current | $I_{F(AV)}$ | 1.0 A | $T_A = 55^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 30A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | 1.0V 1.3V 1.7V | $I_{FM} = 1.0A$; $T_A = 25^\circ\text{C}$ |
| Reverse Current At Rated DC Blocking Voltage (Maximum DC) | I_R | 5.0 A 100 A | $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$ |
| Maximum Reverse Recovery Time | T_{rr} | 50ns 75ns | $I_F=0.5A, I_R=1.0A,$ $I_{rr}=0.25A$ |
| Typical Junction Capacitance | C_J | 20pF 15pF | Measured at 1.0MHz, $V_R=4.0V$ |

Notes: 1. 300 us Pulse Width, 1% Duty Cycle.

| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|-------|-----|------|
| | INCHES | | MM | | |
| A | .166 | .205 | 4.2 | 5.2 | |
| B | .08 | .107 | 2.0 | 2.7 | |
| C | .028 | .034 | .71 | .86 | |
| D | 1.000 | --- | 25.40 | --- | |

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RATINGS AND CHARACTERISTIC CURVES

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

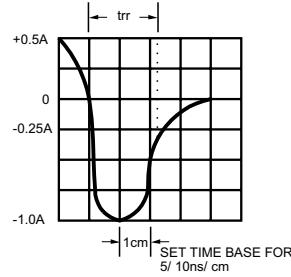
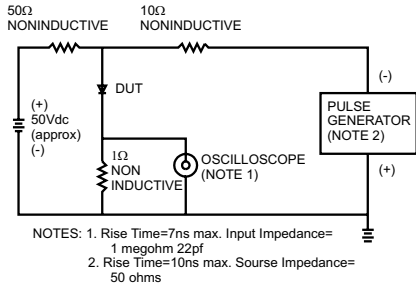


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

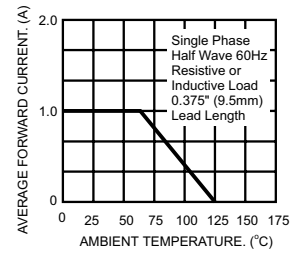


FIG.3- TYPICAL REVERSE CHARACTERISTICS

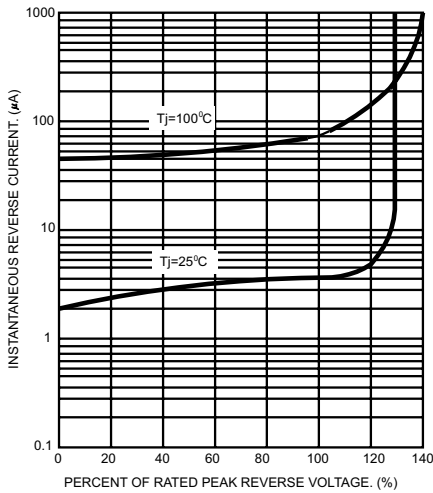


FIG.4- TYPICAL FORWARD CHARACTERISTICS

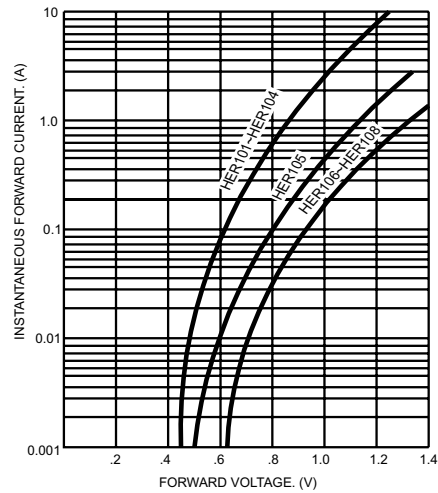


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

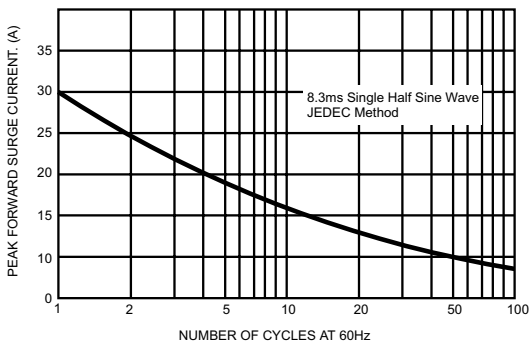


FIG.6- TYPICAL JUNCTION CAPACITANCE

