



Micro Commercial Components



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HER601 THRU HER608

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

Features

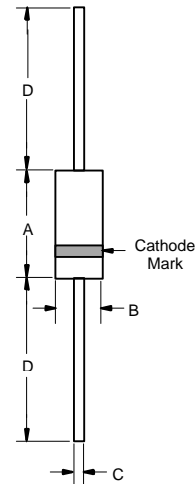
- High Surge Current Capability
- High Reliability
- Low Forward Voltage Drop
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -55°C to +150°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 |
|--------------------|----------------|--|---------------------|-----------------------------|
| HER601 | HER601 | 50V | 35V | 50V |
| HER602 | HER602 | 100V | 70V | 100V |
| HER603 | HER603 | 200V | 140V | 200V |
| HER604 | HER604 | 300V | 210V | 300V |
| HER605 | HER605 | 400V | 280V | 400V |
| HER606 | HER606 | 600V | 420V | 600V |
| HER607 | HER607 | 800V | 560V | 800V |
| HER608 | HER608 | 1000V | 700V | 1000V |

R-6



Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|---------------------------------------|---|
| Average Forward Current | $I_{F(AV)}$ | 6 A | $T_A = 55^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 200A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | 1.1V 1.3V 1.7V | $I_{FM} = 6.0A$; $T_A = 25^\circ\text{C}$ |
| Reverse Current At Rated DC Blocking Voltage (Maximum DC) | I_R | 10 μA 200 μA | $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$ |
| 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 | 100pF 65pF | Measured at 1.0MHz, $V_R=4.0V$ |

| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|-------|------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | .340 | .360 | 8.60 | 9.10 | |
| B | .340 | .360 | 8.60 | 9.10 | |
| C | .048 | .052 | 1.20 | 1.30 | |
| D | 1.000 | --- | 25.40 | --- | |

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

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RATINGS AND CHARACTERISTIC CURVES

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

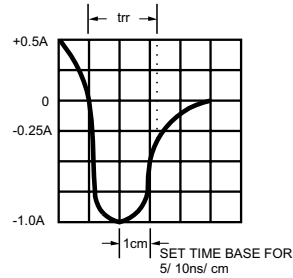
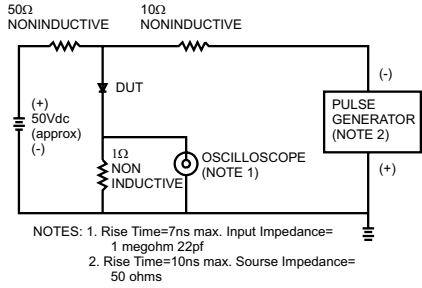


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

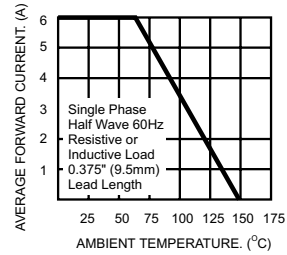


FIG.3- TYPICAL REVERSE CHARACTERISTICS

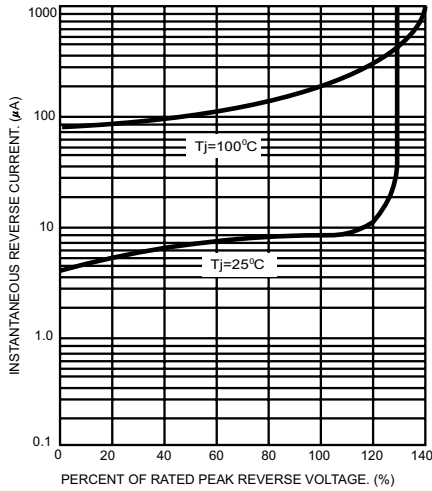


FIG.5- TYPICAL FORWARD CHARACTERISTICS

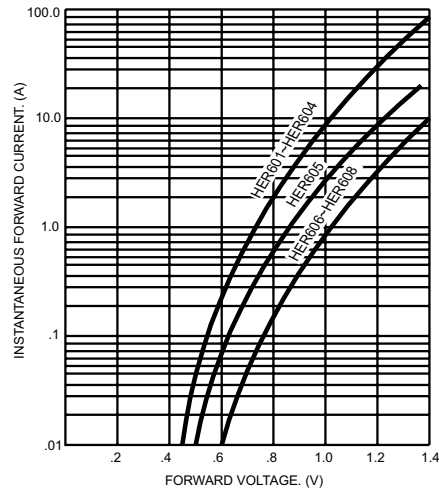


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

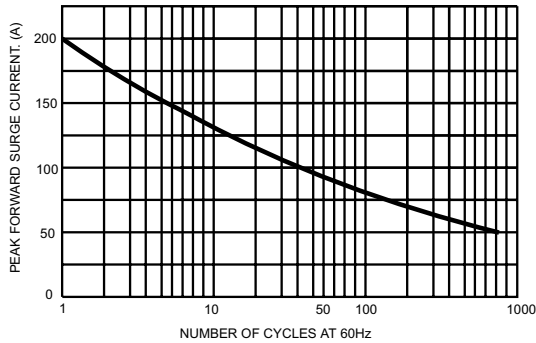
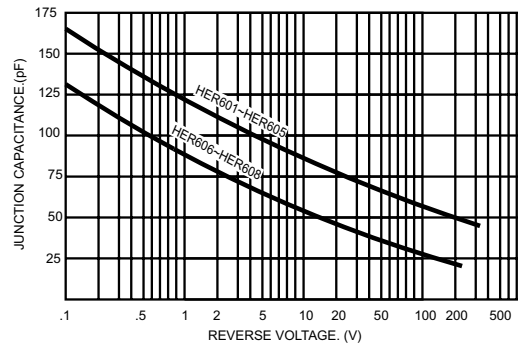


FIG.6- TYPICAL JUNCTION CAPACITANCE





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Ordering Information :

| Device | Packing |
|----------------|-------------------------------|
| Part Number-TP | Tape&Reel: 500pcs/Reel |
| Part Number-AP | Ammo Packing: 450pcs/Ammo Box |
| Part Number-BP | Bulk: 4.8Kpcs/Carton |

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