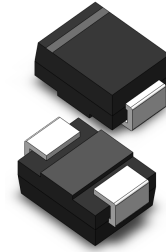


VOLTAGE RANGE: 50 - 1000V
CURRENT: 2.0 A

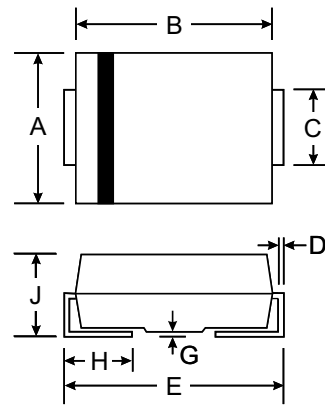


Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Low Power Loss
- Ultra-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O

Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)



| SMB(DO-214AA) | | |
|----------------------|------|------|
| Dim | Min | Max |
| A | 3.30 | 3.94 |
| B | 4.06 | 4.70 |
| C | 1.91 | 2.21 |
| D | 0.15 | 0.31 |
| E | 5.00 | 5.59 |
| G | 0.10 | 0.20 |
| H | 0.76 | 1.52 |
| J | 2.00 | 2.62 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

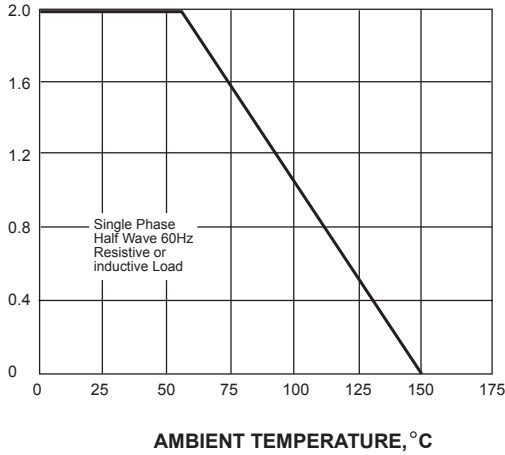
| Characteristic | Symbol | HFM201 | HFM202 | HFM203 | HFM204 | HFM205 | HFM206 | HFM207 | HFM208 | Unit | |
|--|--|-------------|--------|--------|--------|--------|--------|--------|--------|------|------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V _{RRM} V _{RWM} V _R | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V | |
| RMS Reverse Voltage | V _{R(RMS)}} | 35 | 70 | 140 | 210 | 280 | 420 | 560 | 700 | V | |
| Average Rectified Output Current @T _L = 55°C | I _o | 2.0 | | | | | | | | A | |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 50 | | | | | | | | A | |
| Forward Voltage @I _F = 2.0A | V _{FM} | 1.0 | | 1.3 | | 1.7 | | | | V | |
| Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C | I _{RM} | 10 | | | | 50 | | | | μA | |
| Reverse Recovery Time (Note 1) | t _{rr} | 50 | | | | | 75 | | | | nS |
| Typical Junction Capacitance (Note 2) | j C | 20 | | | | | | | | | pF |
| Typical Thermal Resistance (Note 3) | R _{θJL} | 50 | | | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _j , T _{STG} | -50 to +150 | | | | | | | | °C | |

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A. See figure 5.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
 3. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES HFM201 - HFM208

AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

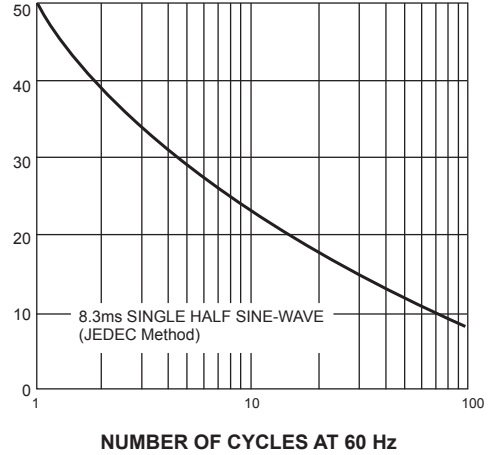
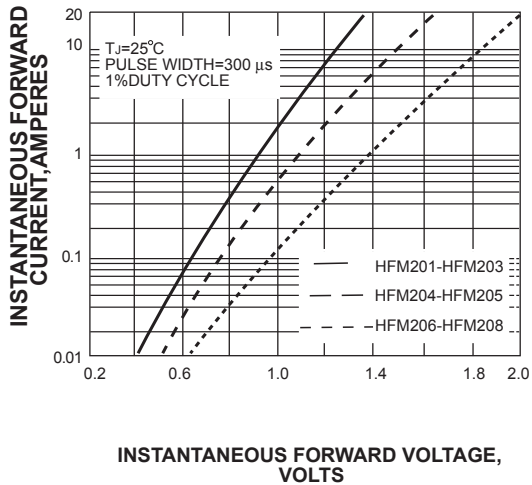


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

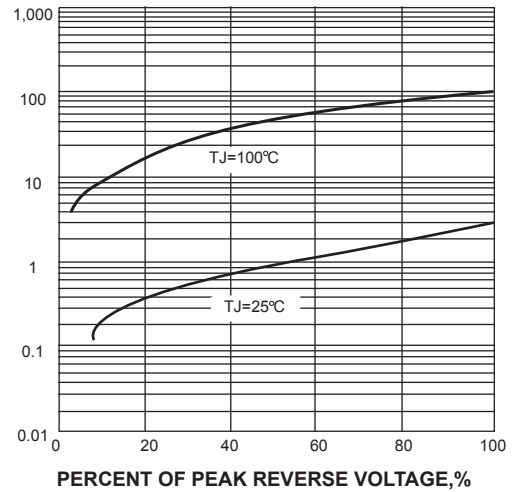
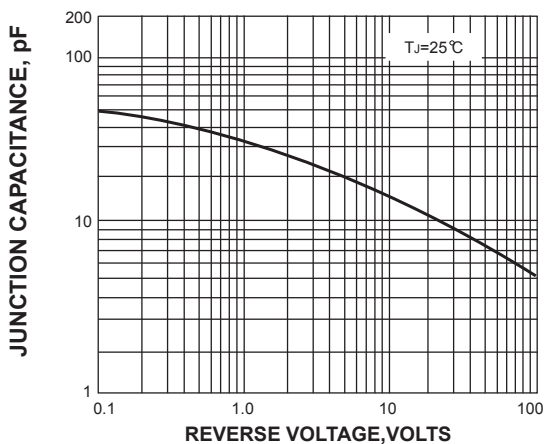


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

