



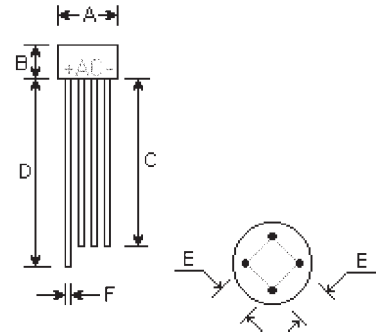
# W005M THRU W10M

**SINGLE-PHASE SILICON BRIDGE**  
**Reverse Voltage - 50 to 1000 Volts**  
**Forward Current - 1.5 Amperes**

## Features

- Surge overload rating - 50 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Mounting Position: Any

## WOM



| DIMENSIONS |        |       |      |      |      |
|------------|--------|-------|------|------|------|
| DIM        | inches |       | mm   |      | Note |
|            | Min.   | Max.  | Min. | Max. |      |
| A          | 0.300  | 0.340 | 7.6  | 8.6  | ϕ    |
| B          | 0.180  | 0.220 | 4.6  | 5.6  |      |
| C          | 1.20   | -     | 30.5 | -    |      |
| D          | 1.27   | -     | 32.3 | -    |      |
| E          | 0.180  | 0.220 | 4.6  | 5.6  |      |
| F          | 0.028  | 0.032 | 0.71 | 0.81 | ϕ    |

## Maximum Ratings and Electrical Characteristics

Ratings 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    | W005M       | W01M | W02M | W04M | W06M | W08M | W10M | Units               |
|--|------------|-------------|------|------|------|------|------|------|---------------------|
| Maximum repetitive peak reverse voltage  | $V_{RRM}$  | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | Volts               |
| Maximum RMS voltage  | $V_{RMS}$  | 35          | 70   | 140  | 280  | 420  | 560  | 700  | Volts               |
| Maximum DC blocking voltage  | $V_{DC}$   | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | Volts               |
| Maximum average forward rectified current<br>$T_A=25^\circ\text{C}$  | $I_{(AV)}$ | 1.5         |      |      |      |      |      |      | Amps                |
| Peak forward surge current, 8.3mS single half sine-wave superimposed on rated load                                       | $I_{FSM}$  | 50.0        |      |      |      |      |      |      | Amps                |
| 1 <sup>2</sup> t Rating for fusing (t<8.35ms)  | $I^2t$     | 5.0         |      |      |      |      |      |      | A <sup>2</sup> t    |
| Maximum forward voltage drop per element at 1.0A peak  | $V_F$      | 1.0         |      |      |      |      |      |      | Volt                |
| Maximum DC reverse current at rated DC blocking voltage per element<br>$T_A=25^\circ\text{C}$<br>$T_A=100^\circ\text{C}$ | $I_R$      | 10.0<br>1.0 |      |      |      |      |      |      | $\mu\text{A}$<br>mA |
| Operating temperature range  | $T_J$      | -55 to +125 |      |      |      |      |      |      | °C                  |
| Storage temperature range  | $T_{STG}$  | -55 to +150 |      |      |      |      |      |      | °C                  |

# RATINGS AND CHARACTERISTIC CURVES

Fig. 1 – MAXIMUM FORWARD SURGE CURRENT

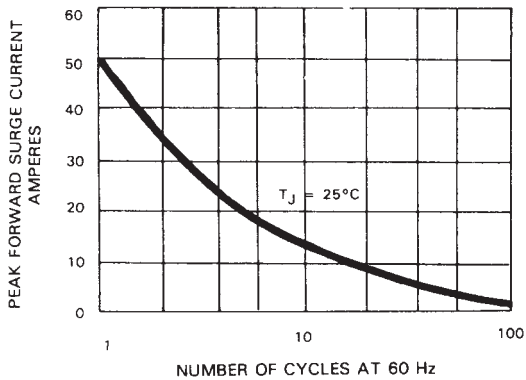


Fig. 2 – DERATING CURVE  
OUTPUT RECTIFIED CURRENT

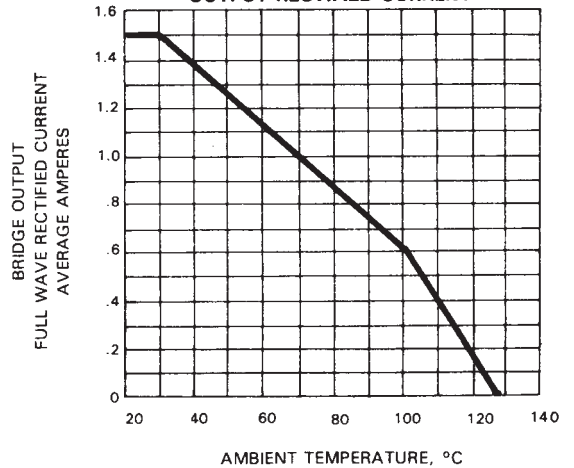


Fig. 3 – TYPICAL FORWARD CHARACTERISTICS

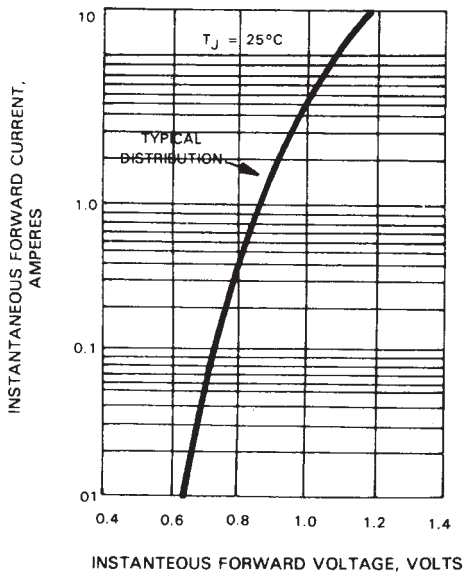


Fig. 4 – TYPICAL REVERSE CHARACTERISTICS

