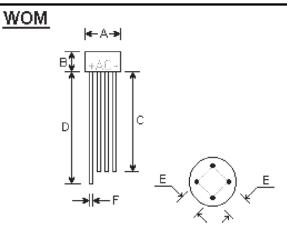


## W005M THRU W10M

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



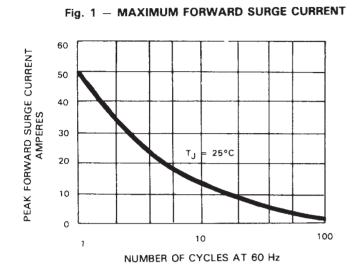
| DIMENSIONS |        |       |      |      |      |  |  |  |  |  |
|------------|--------|-------|------|------|------|--|--|--|--|--|
| DIM        | inches |       | m    | Note |      |  |  |  |  |  |
|            | Min.   | Max.  | Min. | Max. | Note |  |  |  |  |  |
| А          | 0.300  | 0.340 | 7.6  | 8.6  | ф    |  |  |  |  |  |
| В          | 0.180  | 0.220 | 4.6  | 5.6  |      |  |  |  |  |  |
| С          | 1.20   | -     | 30.5 | -    |      |  |  |  |  |  |
| D          | 1.27   | -     | 32.3 | -    |      |  |  |  |  |  |
| Е          | 0.180  | 0.220 | 4.6  | 5.6  |      |  |  |  |  |  |
| F          | 0.028  | 0.032 | 0.71 | 0.81 | ф    |  |  |  |  |  |

## **Maximum Ratings and Electrical Characteristics**

Ratings at  $25^{\circ}$  ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

|  |                   | 64/1805     |      | 64/1815 | 64/1835 |      | 64/1855 |      |          |
|--|-------------------|-------------|------|---------|---------|------|---------|------|----------|
|  | Symbols           | W005M       | W01M | W02M    | W04M    | W06M | W08M    | W10M | Units    |
| Maximum repetitive peak reverse voltage  | V <sub>RRM</sub>  | 50          | 100  | 200     | 400     | 600  | 800     | 1000 | Volts    |
| Maximum RMS voltage  | V <sub>RMS</sub>  | 35          | 70   | 140     | 280     | 420  | 560     | 700  | Volts    |
| Maximum DC blocking voltage  | V <sub>DC</sub>   | 50          | 100  | 200     | 400     | 600  | 800     | 1000 | Volts    |
| Maximum average forward rectified current $T_{\rm A}$ =25 $\rm °C$                 | I <sub>(AV)</sub> | 1.5         |      |         |         |      |         |      | Amps     |
| Peak forward surge current, 8.3mS single half sine-wave superimposed on rated load | I <sub>FSM</sub>  | 50.0        |      |         |         |      |         |      | Amps     |
| 1 <sup>2</sup> t Rating for fusing (t<8.35ms)                                      | l²t               | 5.0         |      |         |         |      |         |      | A²t      |
| Maximum forward voltage drop<br>per element at 1.0A peak                           | V <sub>F</sub>    | 1.0         |      |         |         |      |         |      | Volt     |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$                               | I <sub>R</sub>    | 10.0<br>1.0 |      |         |         |      |         |      | μA<br>mA |
| Operating temperature range  | T                 | -55 to +125 |      |         |         |      |         |      | °C       |
| Storage temperature range  | T <sub>stg</sub>  | -55 to +150 |      |         |         |      |         | ĉ    |          |





## Fig. 2-DERATING CURVE **OUTPUT RECTIFIED CURRENT** 1.6 1.4 FULL WAVE RECTIFIED CURRENT AVERAGE AMPERES 1.2 1.0 .8 6 .4 .2 0 40 140 20 60 100 120 80 AMBIENT TEMPERATURE, °C

BRIDGE OUTPUT

Fig. 3 – TYPICAL FORWARD CHARACTERISTICS

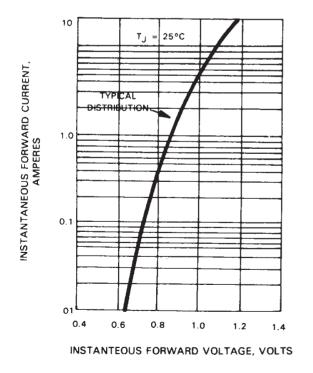


Fig. 4 — TYPICAL REVERSE CHARACTERISTICS

