

T-23-05

**WL005M THRU WL10M**

1.0 AMPERE MINIATURE SINGLE PHASE SILICON BRIDGE

**GENERAL  
INSTRUMENT****FEATURES**

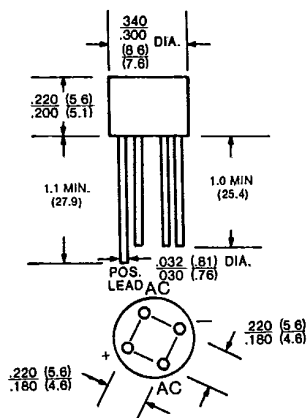
- This series is UL recognized under component index, file number E54214
- Plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High case dielectric strength
- Typical  $I_A$  less than  $.1\mu A$
- High overload surge capability
- Ideal for printed circuit board
- High temperature soldering guaranteed:  $265^\circ C/10$  seconds/.375" (9.5mm) lead length/5 lbs., (2.3kg) tension

**MECHANICAL DATA**

Case: Reliable low cost construction utilizing molded plastic technique  
 Terminals: Leads solderable per MIL-STD-202, Method 208  
 Mounting position: Any  
 Weight: 0.05 ounces, 1.3 grams

**VOLTAGE RANGE**  
 50 to 1000 Volts

**CURRENT**  
 1.0 Ampere



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at  $25^\circ C$  ambient temperature unless otherwise specified.  
 60Hz, resistive or inductive load  
 For capacitive load, derate current by 20%.

|                                                                                                        | WL005M      | WL01M | WL02M | WL04M | WL06M | WL08M | WL10M | Units           |
|--------------------------------------------------------------------------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-----------------|
| Maximum Recurrent Peak Reverse Voltage                                                                 | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | $V_{RRM}$       |
| Maximum RMS Bridge Input Voltage                                                                       | 35          | 70    | 140   | 280   | 420   | 560   | 700   | $V_{RMS}$       |
| Maximum DC Blocking Voltage                                                                            | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | $V_{DC}$        |
| Maximum Average Forward Rectified Current<br>.375", 9.5mm lead lengths at $T_A=50^\circ C$             | 1.0         |       |       |       |       |       |       | $A(AV)$         |
| Peak Forward Surge Current, single sine-wave<br>superimposed on rated load (JEDEC Method)              | 30.0        |       |       |       |       |       |       | $A_{pk}$        |
| $I^2t$ Rating for fusing ( $t \leq 8.35ms$ )                                                           | 5.0         |       |       |       |       |       |       | $A^2s$          |
| Maximum Instantaneous Forward Voltage<br>Drop per element at 1.0A                                      | 1.2         |       |       |       |       |       |       | $V_{pk}$        |
| Maximum Reverse Current at Rated $T_A=25^\circ C$<br>DC Blocking Voltage per element $T_A=100^\circ C$ | 10.0<br>1.0 |       |       |       |       |       |       | $\mu A$<br>$mA$ |
| Typical Junction Capacitance per element (Note 1)                                                      | 24.0        |       |       |       |       |       |       | $pF$            |
| Maximum Thermal Resistance $\theta_{JA}$ (Note 2)                                                      | 60.0        |       |       |       |       |       |       | $^\circ C/W$    |
| Operating Temperature Range $T_A$                                                                      | -50 to +125 |       |       |       |       |       |       | $^\circ C$      |
| Storage Temperature Range $T_{stg}$                                                                    | -50 to +150 |       |       |       |       |       |       | $^\circ C$      |

**NOTES**

1. Measured at 10MHz and applied reverse voltage of 4.0 volts.
2. Thermal Resistance from junction to ambient at .375", 9.5mm lead length on P.C. Board mounting.

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**RATING AND CHARACTERISTIC CURVES**  
WL005M THRU WL10M SERIES

