

# AW02M Thru AW08M

## 1.5 AMP CONTROLLED AVALANCHE SILICON BRIDGE RECTIFIER

### FEATURES

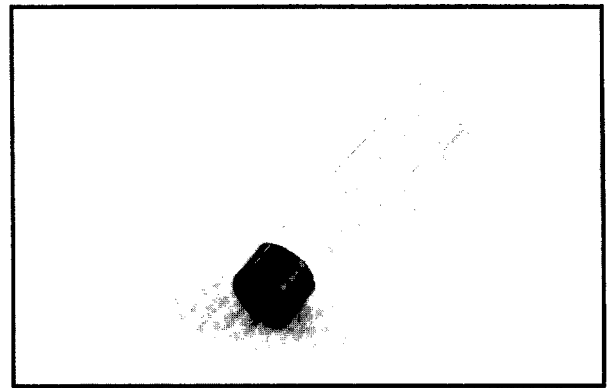
- Controlled avalanche series with 250V, 450V, 650V and 850V minimum avalanche ratings
- Surge overload rating to 50A peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique resulting in inexpensive product
- UL recognized: File #E106441

### Mechanical Data

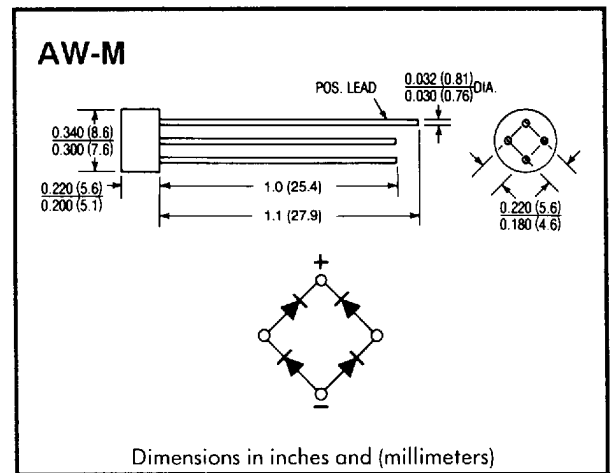
- Case: Molded plastic
- Leads: Silver plated copper
- Leads solderable per MIL-STD-202, Method 208
- Mounting Position: Any
- Weight: 0.05 ounce, 1.4 grams

### Maximum Ratings & 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%



### Outline Drawing



		AW02M	AW04M	AW06M	AW08M	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	400	600	800	V
Maximum RMS Input Voltage	$V_{RMS}$	140	280	420	560	V
Maximum DC Blocking Voltage		200	400	600	800	V
Minimum Avalanche Breakdown Voltage at 100 $\mu$ A	$V_{(BR)}$	250	450	650	850	V
Maximum Avalanche Breakdown Voltage at 100 $\mu$ A	$V_{(BR)}$	700	900	1100	1300	V
Maximum Average Forward Output Current .375" 9.5mm lead length @ $T_A = 25^\circ\text{C}$	$I_{(AV)}$	1.5				A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load	$I_{FSM}$	50				A
$I^2 t$ Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2 t$	5.0				A <sup>2</sup> t
Maximum Instantaneous Forward Voltage Drop per Bridge element At 1.0A	$V_F$	1.0				V
Maximum Reverse Current At Rated DC Blocking Voltage per Bridge Element @ $T_A = 25^\circ\text{C}$	$I_R$	10				$\mu$ A
DC Blocking Voltage per Bridge Element @ $T_A = 100^\circ\text{C}$		1.0				mA
Typical junction capacitance (see Note)		24.0				pF
Operating Temperature Range	$T_J$	-55 to +125				$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150				$^\circ\text{C}$

Note: Measured at 1.0 MHz and applied reverse voltage of 4.0V