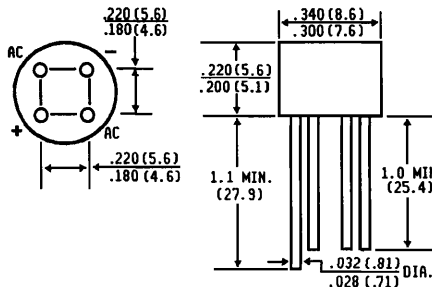


AW02M THRU AW08M

MINIATURE CONTROLLED AVALANCHE SINGLE PHASE SILICON BRIDGE RECTIFIER VOLTAGE - 200 to 800 Volts CURRENT - 1.5 Amperes

FEATURES



Dimensions in inches
and
(millimeters)

- ◆ 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_R less than 0.1 μA
- ◆ High overload surge capability
- ◆ Ideal for printed circuit board
- ◆ Controlled Avalanche Series
- ◆ 200 Watts Avalanche Power Dissipation for 100 μS pulse width
- ◆ High temperature soldering guaranteed: 250°C/10 seconds/.375", (9.5mm) lead length at/5 lbs., (2.3kg) tension

MECHANICAL DATA

Case: Reliable low cost construction utilizing molded plastic technique

Terminals: Plated Leads solderable per MIL-STD-202, Method 208

Mounting Position: Any

Weight: 0.05 ounce, 1.3 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	AW02M	AW04M	AW06M	AW08M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	800	Volts
Maximum RMS Voltage	V_{RMS}	140	280	420	560	Volts
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	Volts
Minimum Avalanche Breakdown Voltage at 100 μA	V_{BR}	250	450	650	850	Volts
Maximum Avalanche Breakdown Voltage at 100 μA	V_{BR}	700	900	1100	1300	Volts
Maximum Average Forward Output Current .375" (9.5mm) Lead Length at $T_A = 55^\circ C$	$I_{(AV)}$	1.5				Amps
Peak Forward Surge Current, Single half sine -wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0				Amps
Rating for fusing ($t < .00835$)	$I^2 t$	10.0				A ² s
Maximum Instantaneous Forward Drop per element at 1.0A	V_F	1.0				Volts
Maximum DC Reverse Current $T_A = 25^\circ C$ at Rated DC Blocking Voltage $T_A = 100^\circ C$	I_R	10.0 1.0				μA mA
Typical Junction Capacitance per element (Note 1)	C_J	24.0				pf
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	36.0				$^\circ C/W$
Operating Temperature Range	T_J	-50 to +125				$^\circ C$
Storage Temperature Range	T_{STG}	-50 to +150				$^\circ C$

NOTES: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.

2. Thermal Resistance from Junction to ambient at .375", (9.5mm) lead lengths mounted on P.C. Board with .2" x .2" (5.5mm x 5.5mm) Copper Pads.

RATINGS AND CHARACTERISTIC CURVES AW02M THRU AW08M

