

DATA SHEET

W005M~W10M

1.0 AMPERES MINIATURE SINGLE-PHASE SILICON BRIDGE

VOLTAGE 50 to 1000 Volts **CURRENT** 1.0 Amperes

AM

Unit: inch (mm)

FEATURES

- Plastic material used carries Underwriters Laboratory recognition.
- High surge dielectric strength.
- Typical I_R LESS Than 1uA.
- Exceeds environmental standards of MIL-STD-19500
- Ideal for printed circuit board.
- High temperature soldering guaranteed: 265°C/10 seconds/ .375" (9.5 mm) lead length/5 lbs. (2.3kg) tension
- Pb free product are available : 99% Sn can meet RoHS environment substance directive request

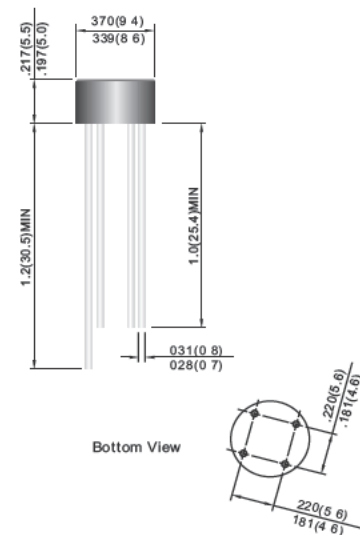
MECHANICAL DATA

Case: Reliable low cost construction utilizing molded plastic technique

Terminals: Leads solderable per MIL-STE-750, Method 2026

Mounting Position: Any

Weight: 0.04 ounces, 1.1 grams.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, Single phase, half wave, 60Hz.

For Capacitive load derate current by 20%.

PARAMETER	SYMBOL	W005M	W01M	W02M	W04M	W06M	W08M	W10M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current .375" (9.5mm) Lead Length at $T_A=25^\circ C$	I_{AV}	1.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50.0							A
Pt Rating for fusing ($t < 8.35ms$)	I^2t	5.0							A ² s
Maximum Forward Voltage Drop per Element at 1.0A	V_F	1.0							V
Maximum DC Reverse Current $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$	I_R	10.0 1000							μA
Typical Junction capacitance per bridge element (Note 1)	C_J	24							pF
Operating Junction Temperature Range	T_J	-55 to + 125							°C
Storage Temperature Range	T_{STG}	-55 to + 150							°C

NOTES:

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

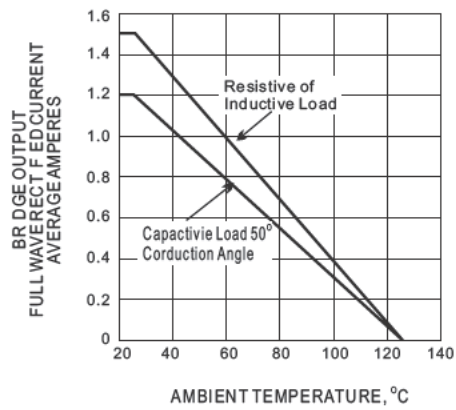


Fig.1 DERATING CURVE OUTPUT RECTIFIED CURRENT

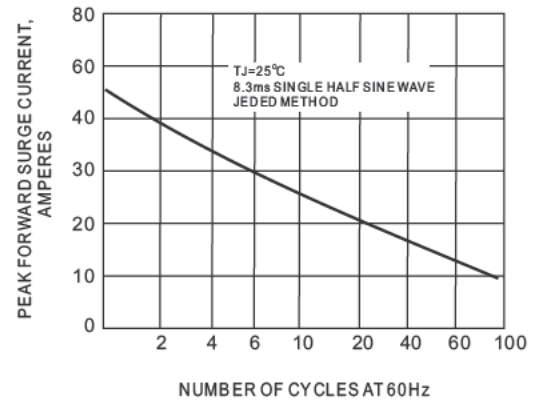


Fig.2 MAXIMUM NON-REPETITIVE PEAK FORWARD CURRENT

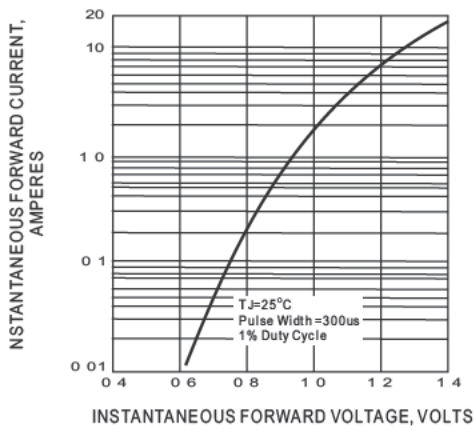


Fig.3 TYPICAL FORWARD CHARACTERISTIC

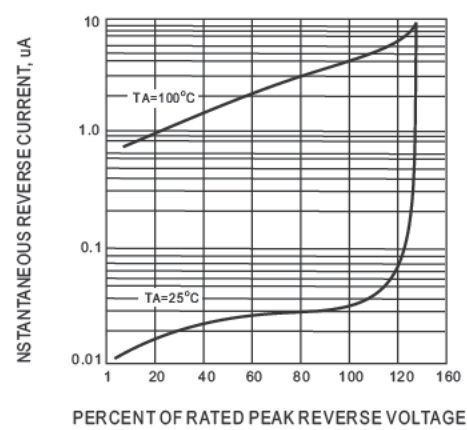


Fig.4 TYPICAL REVERSE CHARACTERISTICS

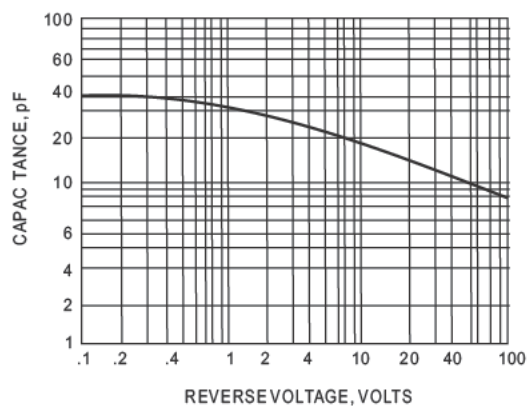


Fig.5 TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT