

Single-Phase Silicon Bridge Rectifier – WOM Package

W005M to W10M

MERITEK

FEATURE

- Surge Overload rating: 40 amperes peak
- Forward Current: 1.5A
- Reverse Voltage: 50~1000V
- Terminal: Plated leads solderable per MIL-STD-202, method 208
- Weight: 0.05 ounce, 1.3 gram
- UL/cUL safety approved: certification No: E223027



ELECTRICAL CHARACTERISTICS

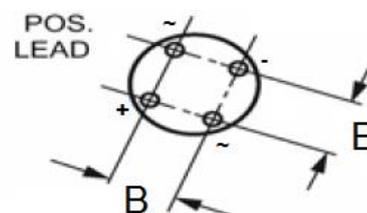
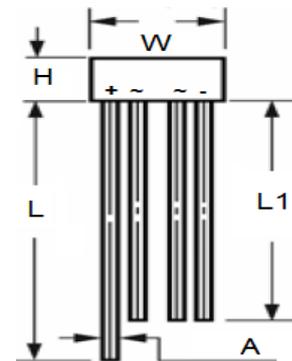


Parameter	Symbols	W005M	W01M	W02M	W04M	W06M	W08M	W10M	Unit
Maximum Recerrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at $T_A=50^{\circ}C$	$I_{(AV)}$	1.5							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	40.0							A
Maximum Forward Voltage at 1.0A DC and $25^{\circ}C$	V_F	1.0							V
Maximum Reverse Current at Rated DC Blocking Voltage	I_R	5.0 at $T_A=20^{\circ}C$, 500 at $T_A=100^{\circ}C$							μA
Typical Junction Capacitance, applied reverse voltage of 4.0 VDC at 1MHz.	C_J	24.0							pF
Typical Thermal Resistance, form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted.	$R_{\theta JA}$	36.0							$^{\circ}C/W$
	$R_{\theta JL}$	13.0							$^{\circ}C/W$
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150							$^{\circ}C$

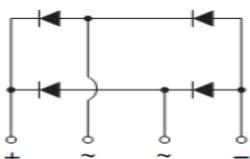
Rating at $25^{\circ}C$, ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

DIMENSIONS

Item	Milimeters	
	Min.	Max.
W	8.6	9.1
H	5.0	5.5
L	30.5	-
L1	25.4	-
A	0.7	0.8
B	4.6	5.6



FUNCTIONAL DIAGRAM



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RATINGS AND CHARACTERISTICS CURVES

Fig.1 Maximum Non-Repetitive Forward Surge Current Per Bridge Element

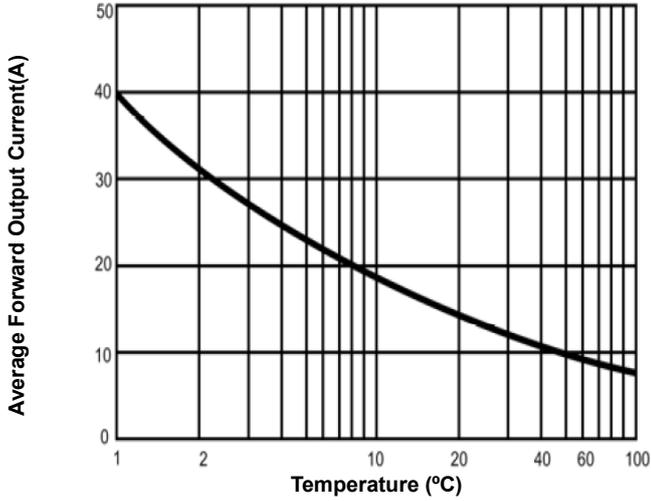


Fig 2. Maximum Current Derating Curve Output Rectified Current

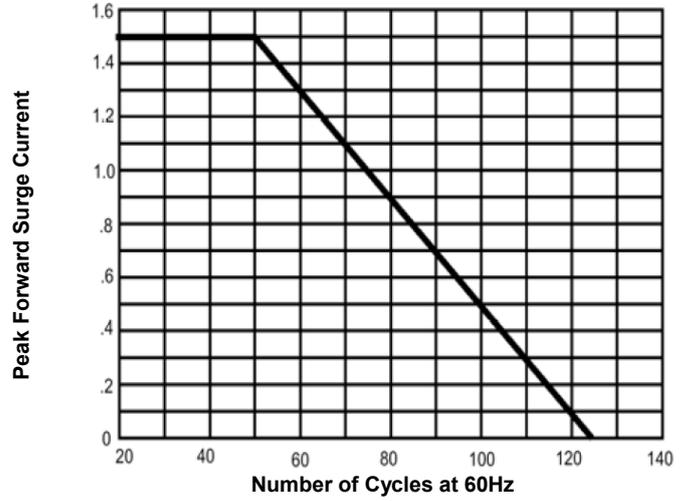


Fig 3. Typical Forward Characteristic Per Leg

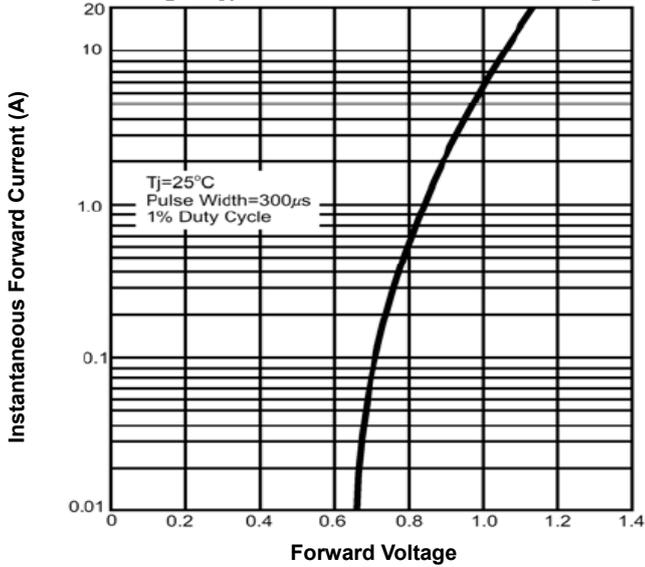


Fig 4. Typical Reverse Characteristics Per Bridge Element

