



# FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206



## SINGLE-PHASE BRIDGE RECTIFIER

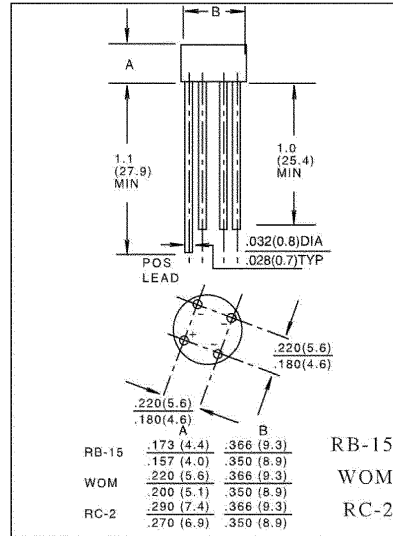
W005M THRU W10M	VOLTAGE RANGE	50 to 1000 Volts
	CURRENT	1.5 Ampere

### FEATURES

- Low cost
- This series is UL recognized under component index, file number E127707
- High forward surge current capability
- Ideal for printed circuit board
- High temperature soldering guaranteed:  
260°C/10 second, 0.375" (9.5mm) lead length at 5 lbs. (2.3kg) tension.

### MECHANICAL DATA

- Case: Molded Plastic body
- Terminal: Lead solderable per MIL - STD - 202E method 208C
- Polarity: Polarity symbols marked on case
- Mounting position : Any
- Weight: 0.042 ounce, 1.2 gram



### MAXIMUM RATINGS AND ELECTRICAL 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%

	SYMBOLS	W005M	W01M	W02M	W04M	W06M	W08M	W10M	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at $T_A = 25^\circ\text{C}$ (Note 2)	$I_{(AV)}$	1.5							Amp
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50							Amps
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	10							$\text{A}^2\text{s}$
Maximum Instantaneous Forward Voltage Drop per bridge element at 1.0A	$V_F$	1.0							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	$T_A = 25^\circ\text{C}$	10							$\mu\text{A}$
	$T_A = 100^\circ\text{C}$	0.5							mA
Typical Junction Capacitance (Note 1)	$C_j$	15							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_j$	(-55 to +125)							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	(-55 to +150)							

### NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on P.C. board with 0.22" X 0.22" (5.5 X 5.5 mm) copper pads, .375" (9.5mm) lead length.



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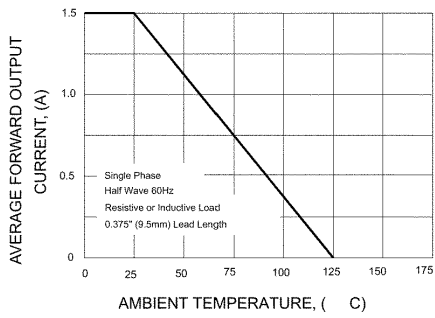
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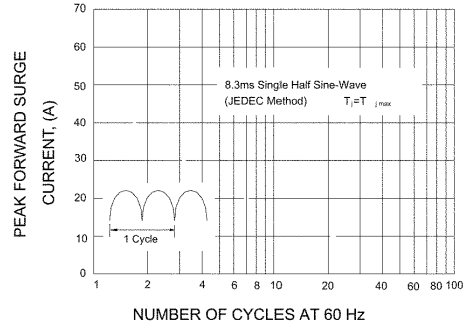
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**RATINGS AND CHARACTERISTIC CURVES W005M THRU W10M**

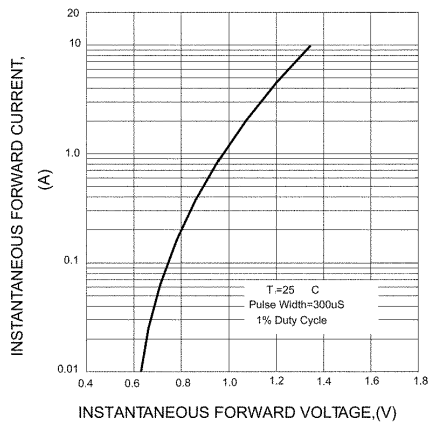
**FIG.1-DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT**



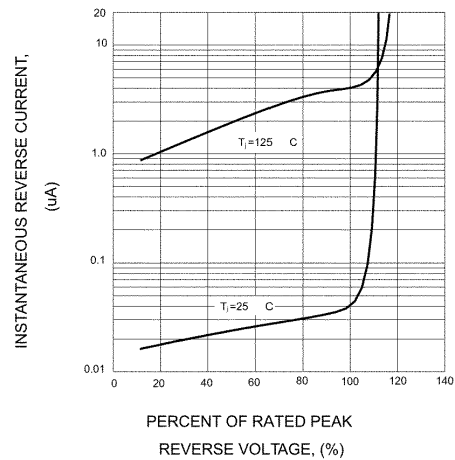
**FIG.2-MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT PER ELEMENT**



**FIG.3-TYPICAL FORWARD CHARACTERISTICS  
PER BRIDGE ELEMENT**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS  
PER BRIDGE ELEMENT**



**FIG.5-TYPICAL JUNCTION CAPACITANCE  
PER BRIDGE ELEMENT**

