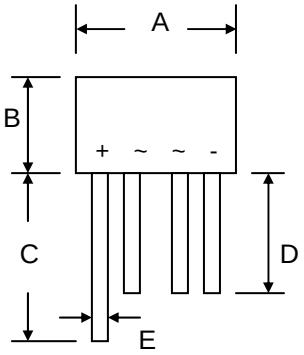
W005M – W10M

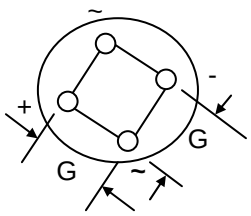
1.5A SINGLE-PHASE BRIDGE RECTIFIER

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Recognized File # E157705



WOB		
Dim	**Min**	**Max**
A	8.60	9.10
B	5.00	5.50
C	21.90	—
D	19.00	—
E	0.69	0.80
G	4.60	5.60
All Dimensions in mm		



Mechanical Data

- Case: WOB, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 1.1 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

Maximum Ratings and Electrical Characteristics @T_A=25℃ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	W005M	W01M	W02M	W04M	W06M	W08M	W10M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @T_A = 50℃ (Note 1)	I_O	1.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Forward Voltage (per element) @I_F = 1.5A	V_{FM}	1.0							V
Peak Reverse Current @T_A = 25℃ At Rated DC Blocking Voltage @T_A = 100℃	I_{RM}	5.0 500							μA
Operating Temperature Range	T_j	-55 to +125							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

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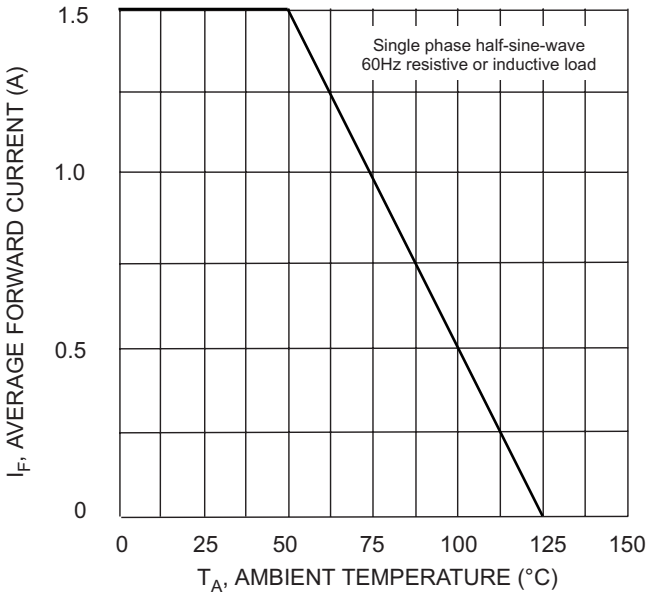

Fig. 1 Forward Current Derating Curve

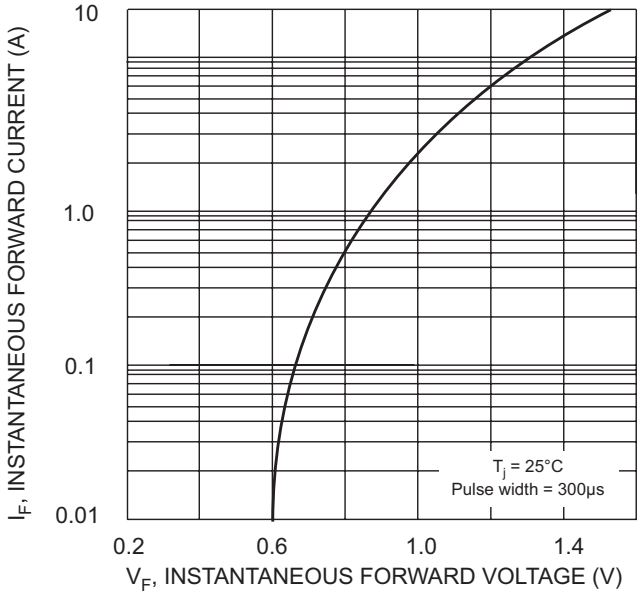

Fig. 2 Typical Forward Characteristics, per element

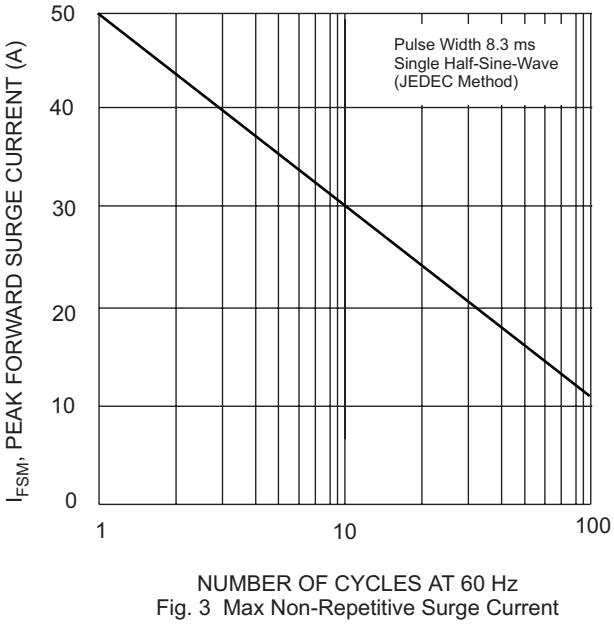

Fig. 3 Max Non-Repetitive Surge Current

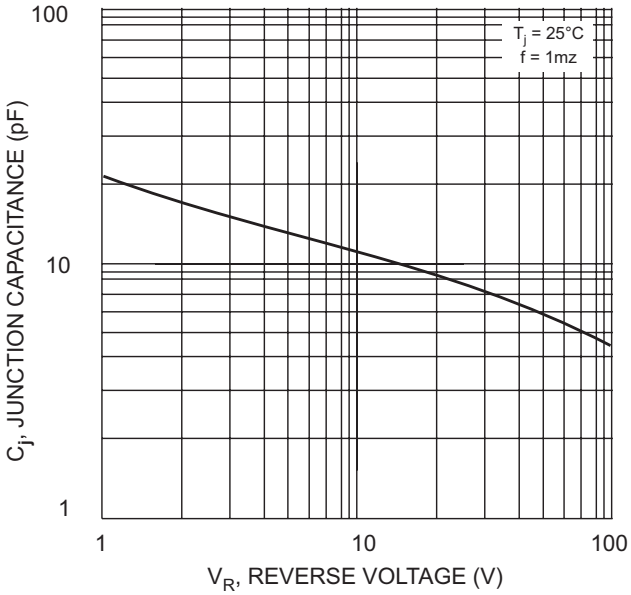

Fig. 4 Typical Junction Capacitance

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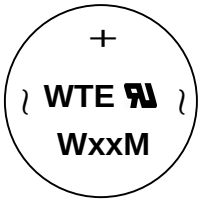
MARKING INFORMATION



WTE	= Manufacturer's Logo
WxxM	= Device Number
xx	= 005, 01, 02, 04, 06, 08, 10
Polarity	= As Marked on Body

PACKAGING INFORMATION

BULK

Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
260 x 190 x 80	1,000	400 x 273 x 415	10,000	14.0

Note: 1. Paper box, white or brown color.

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ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
W005M	Round Bridge	1000 Units/Box
W01M	Round Bridge	1000 Units/Box
W02M	Round Bridge	1000 Units/Box
W04M	Round Bridge	1000 Units/Box
W06M	Round Bridge	1000 Units/Box
W08M	Round Bridge	1000 Units/Box
W10M	Round Bridge	1000 Units/Box

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, W005M-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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