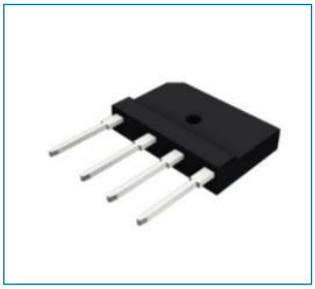
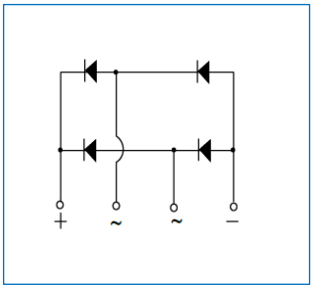
WGBJ25xx

Glass Passivated Bridge Rectifiers





Features

- Low forward voltage drop，high current capability
- Ideal for printed circuit board
- MSL: Level 1
- Forward Current - 25A
- Epoxy meets UL 94 V-0 flammability rating
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Mechanical Data

- Case: GBJ package

Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	WGBJ 25005	WGBJ 2501	WGBJ 2502	WGBJ 2504	WGBJ 2506	WGBJ 2508	WGBJ 2510	UNIT
Maximum repetitive 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 (with heatsink)	$I_{F(AV)}$	25							A
Peak forward surge current 8.3ms single half-sine wave superimposed on rated load	I_{FSM}	350							A
Rating for fusing (t＜8.3ms)	I^2t	508							A^2s
Operating and Storage temperature range	T_J, T_{STG}	-55 ~ +150							℃
Mounting torque @Recommend torque：5kg·cm	Tor	8							kg·cm

Electrical Characteristics(Ta=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	WGBJ 25005	WGBJ 2501	WGBJ 2502	WGBJ 2504	WGBJ 2506	WGBJ 2508	WGBJ 2510	UNIT
Maximum instantaneous forward voltage at IF=12.5A		V_F	1.0							V
Maximum DC reverse current at rated DC blocking voltage	TJ=25℃	I_R	5							μA
	TJ=125℃		200							
Typical Junction Capacitance at VR=4V, f=1MHz		C_j	90							pF
Between Junction to Case (with heatsink)		$R_{\theta J-C}$	1.0							℃/W

Typical Characteristics

FIG.1 Forward Current Derating Curve

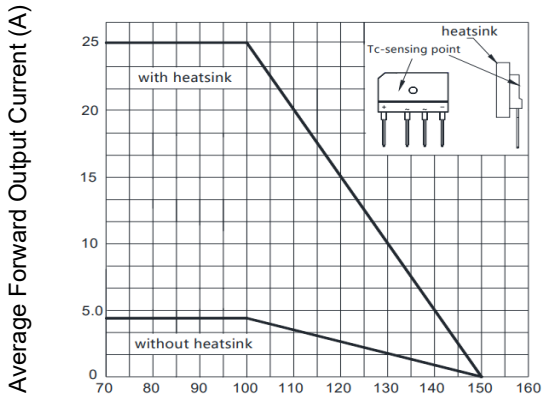


FIG. 2 Forward Surge Current Capability

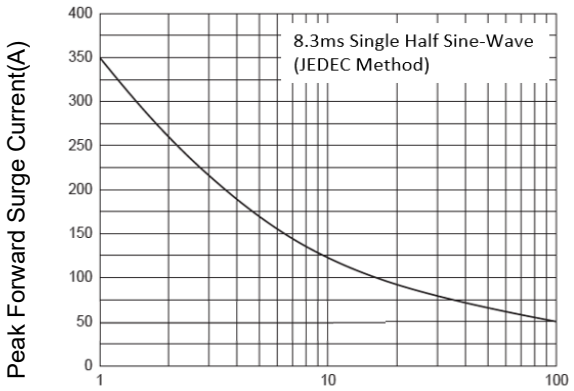


FIG. 3 Typical Forward Characteristics

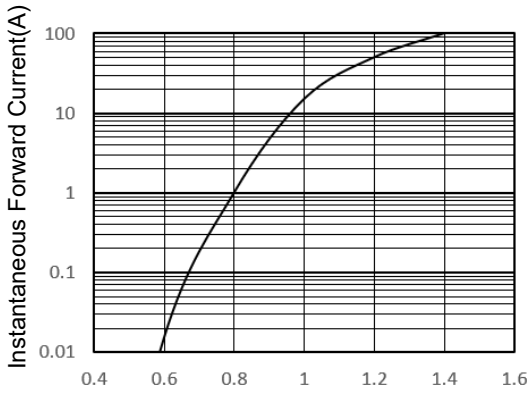
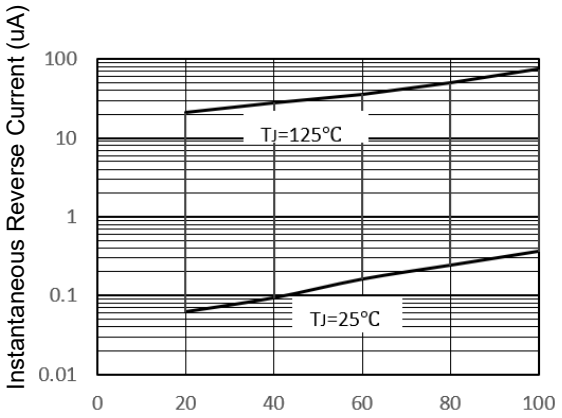


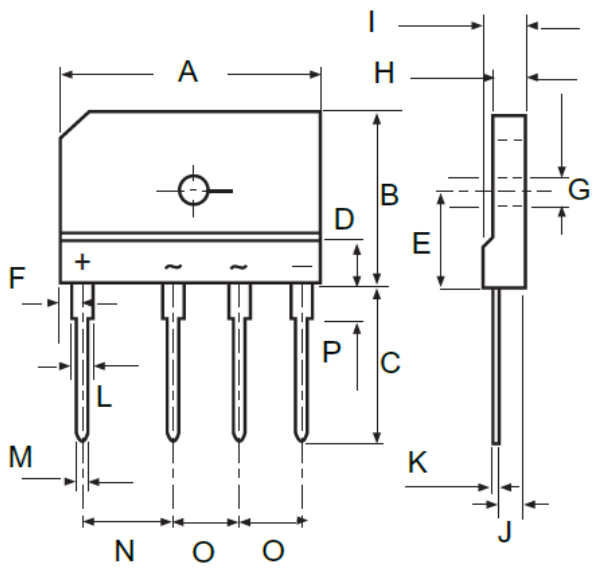
FIG.4 Typical Reverse Characteristics



Note: The above typical parameters or typical characteristics are only indicative and do not make specific guarantees. If detailed values are required, additional communication and provision are required.

Outline Drawing

GBJ



Symbol	GBJ	
	Dimensions In Millimeters	
	Min	Max
A	29.70	30.30
B	19.70	20.30
C	17.00	18.00
D	4.70	5.10
E	10.80	11.20
F	2.30	2.70
G	3.10	3.40
H	3.40	3.80
I	4.40	4.80
J	2.50	2.90
K	0.60	0.80
L	1.90	2.40
M	0.90	1.10
N	9.80	10.20
O	7.30	7.70
P	3.80	4.20

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1.The product specification aims to provide users with a reference regarding various product parameters, performance, and usage. It presents certain aspects of the product's performance in graphical form and is intended solely for users to select product and make product comparisons, enabling users to better understand and evaluate the characteristics and advantages of the product. It does not constitute any commitment, warranty, or guarantee.

2.The product parameters described in the product specification are numerical values, characteristics, and functions obtained through actual testing or theoretical calculations of the product in an independent or ideal state. Due to the complexity of product applications and variations in test conditions and equipment, there may be slight fluctuations in parameter test values. WAYON shall not guarantee that the actual performance of the product when installed in the customer's system or equipment will be entirely consistent with the product specification, especially concerning dynamic parameters. It is recommended that users consult with professionals for product selection and system design. Users should also thoroughly validate and assess whether the actual parameters and performance when installed in their respective systems or equipment meet their requirements or expectations. Additionally, users should exercise caution in verifying product compatibility issues, and WAYON assumes no responsibility for the application of the product.

3.WAYON strives to provide accurate and up-to-date information to the best of our ability. However, due to technical, human, or other reasons, WAYON cannot guarantee that the information provided in the product specification is entirely accurate and error-free. WAYON shall not be held responsible for any losses or damages resulting from the use or reliance on any information in these product specifications. WAYON reserves the right to revise or update the product specification and the products at any time without prior notice, and the user's continued use of the product specification is considered an acceptance of these revisions and updates. Prior to purchasing and using the product, users should verify the above information with WAYON to ensure that the product specification is the most current, effective, and complete. If users are particularly concerned about product parameters, please consult WAYON in detail or request relevant product test reports. Any data not explicitly mentioned in the product specification shall be subject to separate agreement.

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