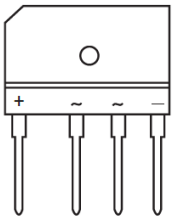
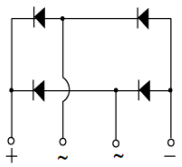
# WGBJ50xx

## GLASS PASSIVATED BRIDGE RECTIFIERE

## Features

- Low forward voltage drop，high current capability
- Ideal for printed circuit board
- Thin single in-line package
- Epoxy meets UL 94 V-0 flammability rating




Case Type

## Mechanical Data

- Case: GBJ Package, molded plastic body

## Absolute Maximum Ratings and Electronics characteristics

Ratings@25℃ ambient temperature unless otherwise specified

| Parameter | Symbol | WGBJ 5001 | WGBJ 5002 | WGBJ 5004 | WGBJ 5006 | WGBJ 5008 | WGBJ 5010 | WGBJ 5012 | WGBJ 5016 | UNIT |
|---|---|---|---|---|---|---|---|---|---|---|
| Maximum repetitive peak reverse voltage | $V_{RRM}$ | 100 | 200 | 400 | 600 | 800 | 1000 | 1200 | 1600 | V |
| Maximum RMS voltage | $V_{RMS}$ | 70 | 140 | 280 | 420 | 560 | 700 | 840 | 1120 | V |
| Maximum DC blocking voltage | $V_{DC}$ | 100 | 200 | 400 | 600 | 800 | 1000 | 1200 | 1600 | V |
| Average forward rectified current $T_C$=100℃ | IF(AV) | 50 | | | | | | | | A |
| Peak forward surge current 8.3ms single half. Sine Wave Superimposed on Rated Load | IFSM | 500 | | | | | | | | A |
| Maximum instantaneous forward voltage at $I_{FM}$=25A,TJ=25℃ | VF | 1.1 | | | | | | | | V |
| Maximum DC reverse current (TJ= 25℃)at rated DC blocking voltage | IR | 5 | | | | | | | | μA |
| Maximum DC reverse current (TJ= 125℃)at rated DC blocking voltage | IR | 500 | | | | | | | | μA |
| $I^2t$ Rating for fusing (t<8.3ms) | $I^2t$ | 1037 | | | | | | | | $A^2S$ |
| Typical Thermal Resistance | $R_{\theta JC}$ | 1.5 | | | | | | | | ℃/W |
| Operating and Storage temperature range | $T_J$,Tstg | -55 ~ +150 | | | | | | | | ℃ |

## Typical characteristics (Ta=25°C, unless otherwise noted)

FIG.1-FORWARD CURRENT DERATING CURVE

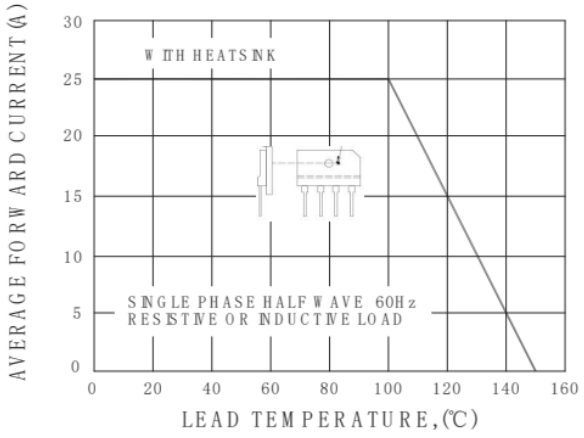



FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

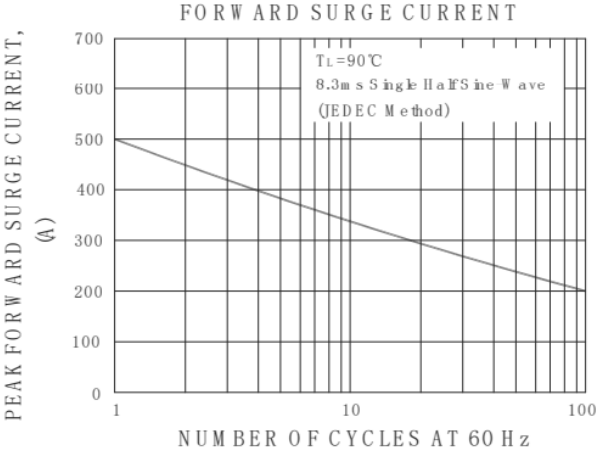



FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

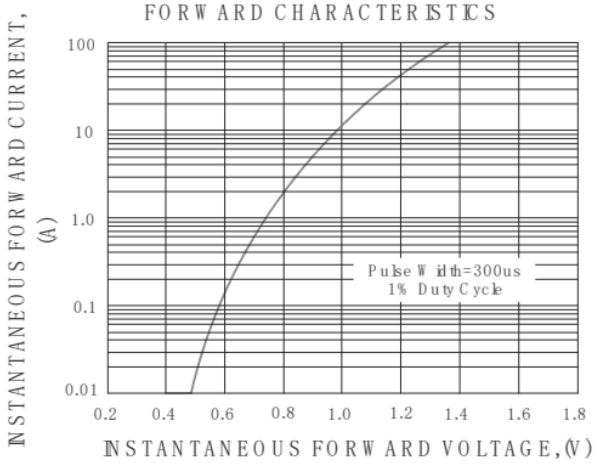



FIG.4-TYPICAL REVERSE CHARACTERISTICS

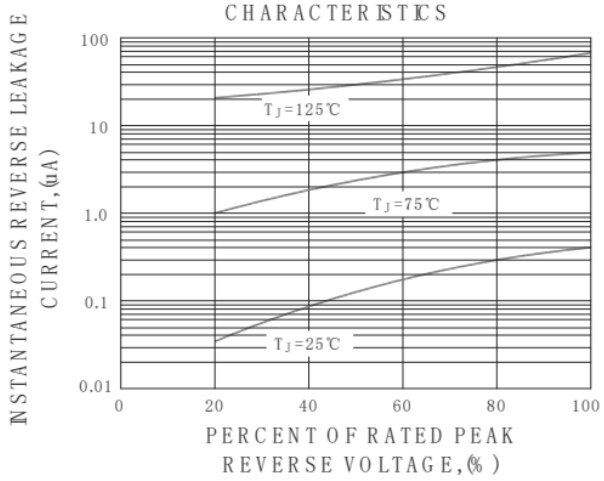
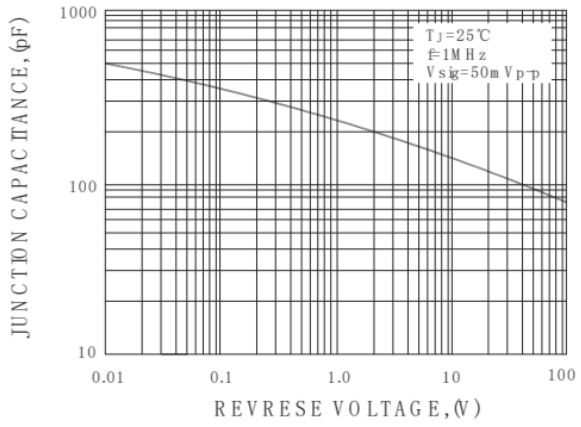
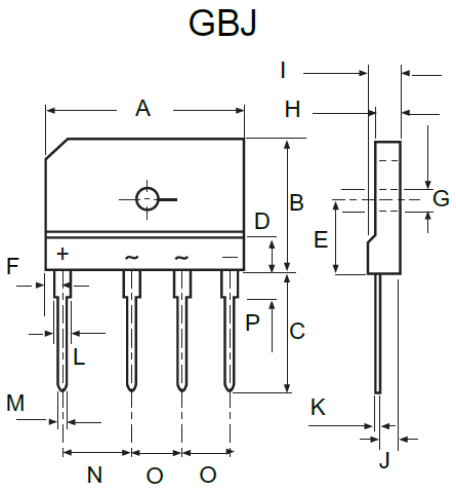



FIG.5-TYPICAL JUNCTION CAPACITANCE




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




| DIMENSIONS | | | | | |
|---|---|---|---|---|---|
| | INCHES | | MM | | |
| DIM | MIN | MAX | MIN | MAX | NOTE |
| A | 1.170 | 1.190 | 29.70 | 30.30 | |
| B | .780 | .800 | 19.70 | 20.30 | |
| C | .670 | .710 | 17.00 | 18.00 | |
| D | .019 | .019 | 4.70 | 4.90 | |
| E | .430 | .440 | 10.80 | 11.20 | |
| F | .090 | .110 | 2.30 | 2.70 | |
| G | .120 | .130 | 3.10 | 3.40 | |
| H | .130 | .150 | 3.40 | 3.80 | |
| I | .170 | .190 | 4.40 | 4.80 | |
| J | .100 | .110 | 2.50 | 2.90 | |
| K | .020 | .030 | 0.60 | 0.80 | |
| L | .080 | .090 | 2.00 | 2.40 | |
| M | .040 | .040 | 0.90 | 1.10 | |
| N | .390 | .400 | 9.80 | 10.20 | |
| O | .290 | .300 | 7.30 | 7.70 | |
| P | .150 | .170 | 3.80 | 4.20 | |

## Contact Information

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# Product Specification Statement

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.

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.

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