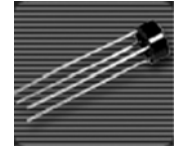


Glass Passivated Single-Phase Bridge Rectifiers

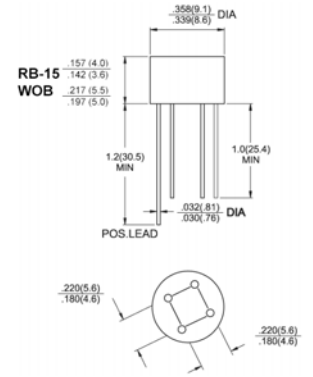
PRODUCT SUMMARY

Reverse Voltage 50 to 1000 Volts
 Forward current 1.5 Amperes



FEATURES

Surge overload ratings to 40 or 50 amperes peak
 Ideal for printed circuit board
 Reliable low cost construction technique results in inexpensive product
 High temperature soldering guaranteed:
 260°C / 10 seconds / 0.375" (9.5mm)
 lead length at 5 lbs. (2.3 kg) tension



Package outline dimensions in inches (millimeters)

MECHANICAL DATA

Cases: Molded plastic
 Terminals: solder plated
 Polarity: As marked
 Weight: 1.07 grams (RB-15), 1.10 grams (WOB)



Pb-free; RoHS-compliant

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

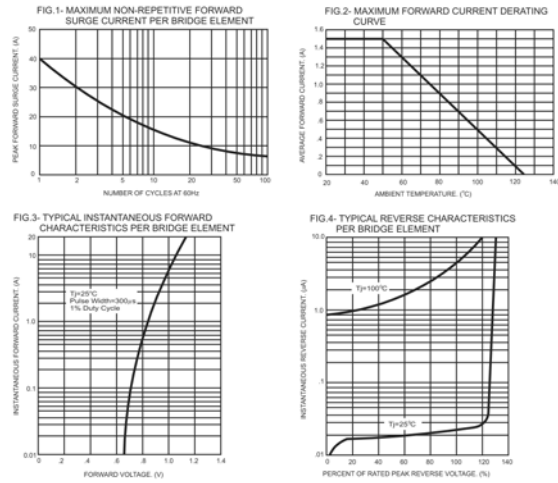
Ratings at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

| Parameter | Symbols | RB151 | RB152 | RB153 | RB154 | RB155 | RB156 | RB157 | Units |
|---|------------------------------------|---|-------|-------|-------|-------|-------|-------|--------------------|
| | | W005 | W01 | W02 | W04 | W06 | W08 | W10 | |
| | | W005M | W01M | W02M | W04M | W06M | W08M | W10M | |
| | | W005G | W01G | W02G | W04G | W06G | W08G | W10G | |
| | | W005GM | W01GM | W02GM | W04GM | W06GM | W08GM | W10GM | |
| Maximum recurrent 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 current at $T_A=50^\circ\text{C}$ | $I_{F(AV)}$ | 1.5 | | | | | | | Amps |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | Wxxx or WxxxM 40.0, RB15x, WxxxG & WxxxGM 50.00 | | | | | | | Amps |
| Max. instantaneous forward voltage drop per element at 0.75A | V_F | 1.0 | | | | | | | Volt |
| Maximum DC reverse current at rated DC blocking voltage per element $T_A=25^\circ\text{C}$ | I_R | 10.0 500 (RB15x, Wxxx, WxxxM @ $T_A=100^\circ\text{C}$, WxxxG or WxxxGM @ $T_A=125^\circ\text{C}$) | | | | | | | μA |
| Typical thermal resistance per leg (Note 1) | $R_{\theta JA}$ $R_{\theta JL}$ | 36 13 | | | | | | | $^\circ\text{C/W}$ |
| Operating junction temperature range | T_J | Wxxx or WxxxM -55 to +125, RB15x, WxxxG & WxxxGM -55 to +150 | | | | | | | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

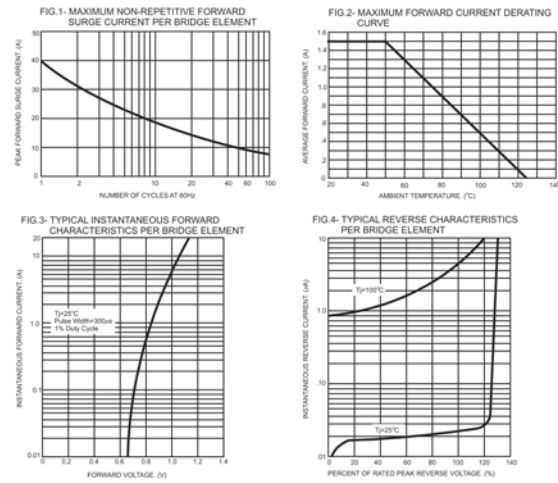
Notes: 1. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2 x 0.2" (5 x 5mm) copper pads

RATINGS AND CHARACTERISTIC CURVES

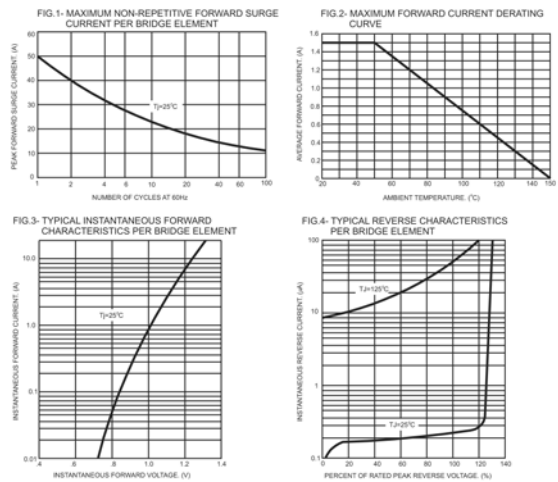
($T_A = 25^\circ\text{C}$ unless otherwise noted) - W005 thru W10



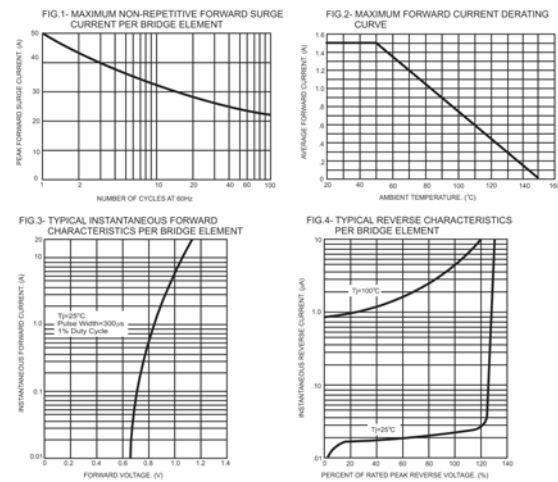
($T_A = 25^\circ\text{C}$ unless otherwise noted) - W005M thru W10M



($T_A = 25^\circ\text{C}$ unless otherwise noted) - RB151 thru RB157, W005G thru W10G



($T_A = 25^\circ\text{C}$ unless otherwise noted) - W005GM thru W10GM



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