

RDB151S THRU RDB157S

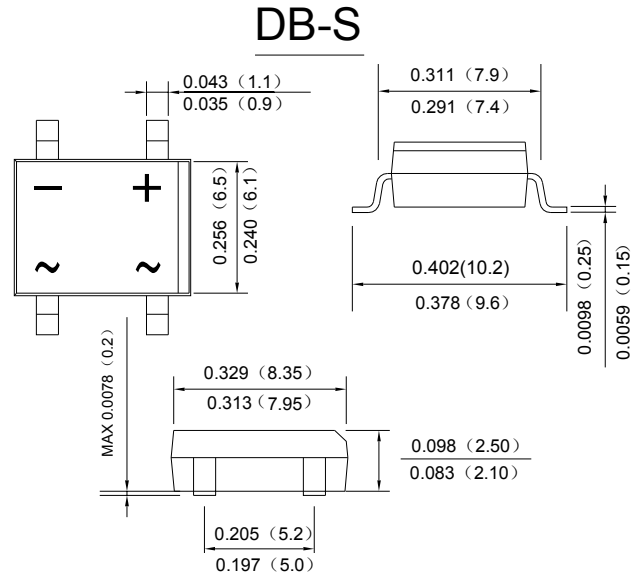
SINGLE PHASE 1.5AMP GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: DB-S, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version,



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| TYPE NUMBER | SYMBOL | RDB 151S | RDB 152S | RDB 153S | RDB 154S | RDB 155S | RDB 156S | RDB 157S | UNITS |
|---|-----------------------------------|-----------|----------|----------|----------|----------|----------|----------|-------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V _{RRM} | | | | | | | | V |
| | V _{RWM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | |
| | V _{DC} | | | | | | | | |
| RMS Reverse Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current (Note 1)@T _A =40°C | 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} | 55 | | | | | | | A |
| Forward Voltage per element @I _F =1.5A | V _{FM} | 1.3 | | | | | | | V |
| Peak Reverse Current @T _A =25°C At Rated DC Blocking Voltage @T _A =125°C | I _R | 500 | | | | | | | uA |
| Maximum reverse recovery time (Note 3) | T _{RR} | 150 | | | | 250 | 500 | ns | |
| Typical Junction Capacitance per leg (Note 2) | C _J | 25 | | | | | | | pF |
| Typical Thermal Resistance per leg | R _{θJA} | 40 | | | | | | | °C/W |
| | R _{θJL} | 15 | | | | | | | |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55to+150 | | | | | | | °C |

Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Fig. 1 Output Current Derating Curve

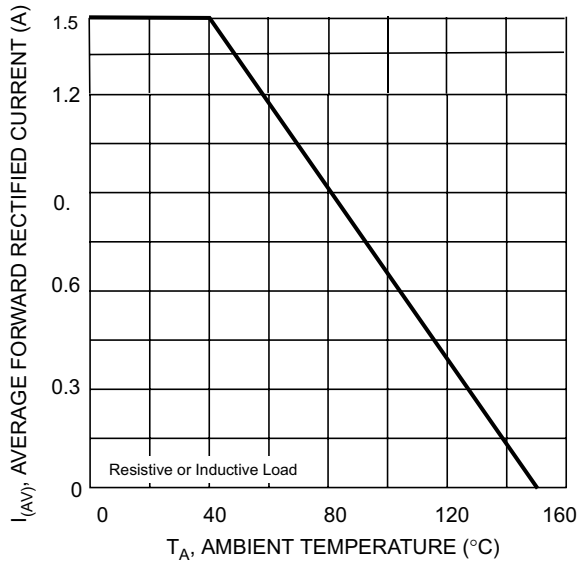


Fig. 2 Typical Forward Characteristics (per leg)

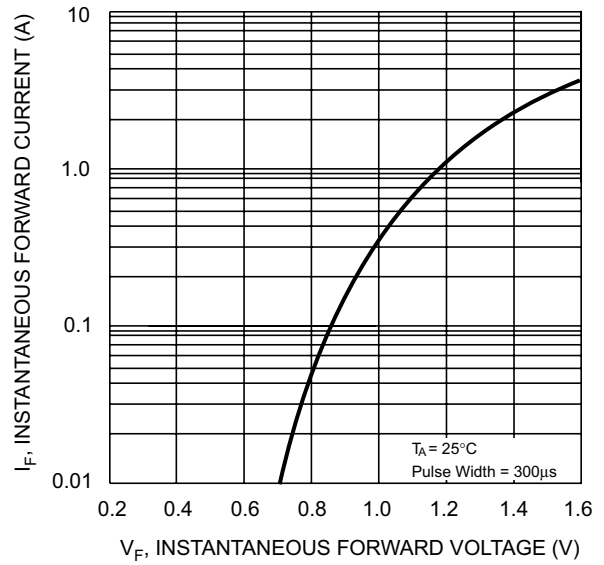


Fig. 3 Maximum Peak Forward Surge Current (per leg)

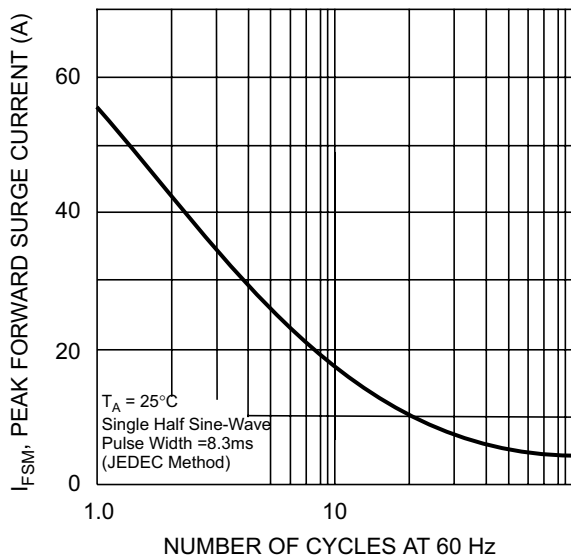


Fig. 4 Typical Reverse Characteristics (per element)

