



THE DATASHEET OF DB156STR



DB151S-DB157S
Single-Phase Glass Passivated Bridge Rectifiers

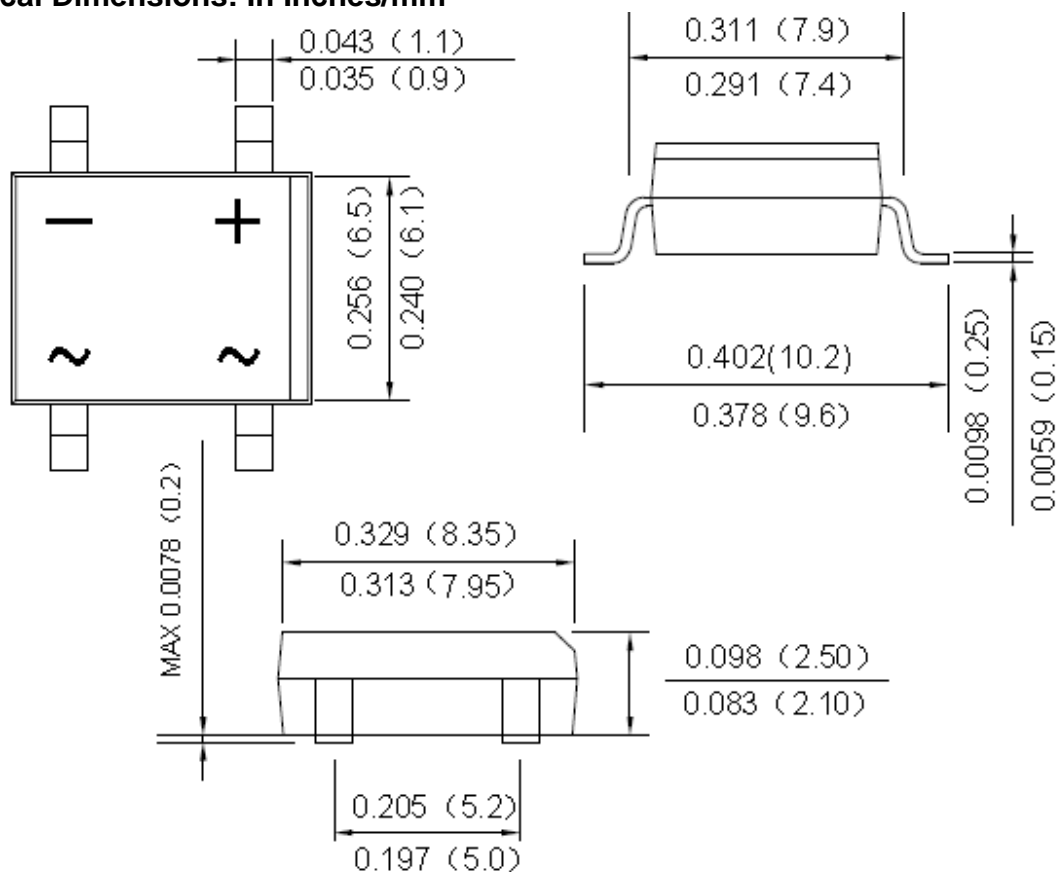
Features:

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

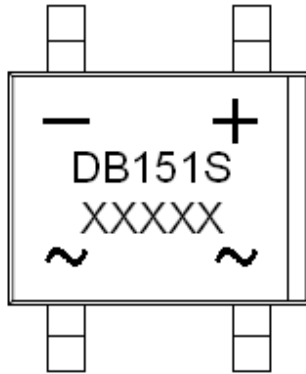
Mechanical Data:

- 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,

Mechanical Dimensions: In Inches/mm



DB-S

Marking Diagram:


Where XXXXX is YYWWL

 DB151S = Part Name
 YY = Year
 WW = Week
 L = Lot Number

Cautions: Molding resin
 Epoxy resin UL: 94V-0

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

| Characteristic | Symbol | DB15 1S | DB15 2S | DB15 3S | DB15 4S | DB15 5S | DB15 6S | DB15 7S | Unit |
|---|-----------------------|-------------|------------|------------|------------|------------|------------|------------|--------------------|
| Peak Repetitive Reverse Voltage DC Blocking Voltage | V_{RRM} V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum average forward rectified output current (Note 2) @ $T_A = 40^\circ\text{C}$ | 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 @ $I_F = 1.5\text{A}$, $T_J = 25^\circ\text{C}$ | V_F | 1.1 | | | | | | | V |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$ | I_{RM} | 5.0 500 | | | | | | | μA |
| Typical Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 40 | | | | | | | $^\circ\text{C/W}$ |
| Typical Thermal Resistance Junction to Lead | $R_{\theta JL}$ | 15 | | | | | | | $^\circ\text{C/W}$ |
| Typical Junction Capacitance (Note 2) | C_J | 25 | | | | | | | pF |
| Operating and Storage Temperature Range | T_J, T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |
| Case Style | | DB-S | | | | | | | |

 Note: 1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC

Fig. 1 Output Current Derating Curve

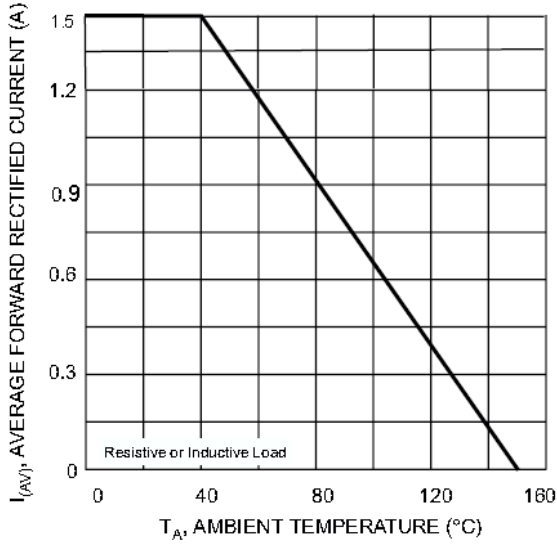


Fig. 2 Typical Forward Characteristics (per leg)

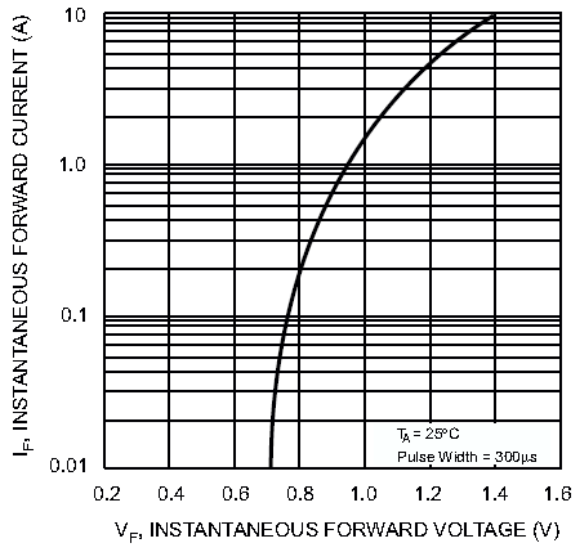


Fig. 3 Maximum Peak Forward Surge Current (per leg)

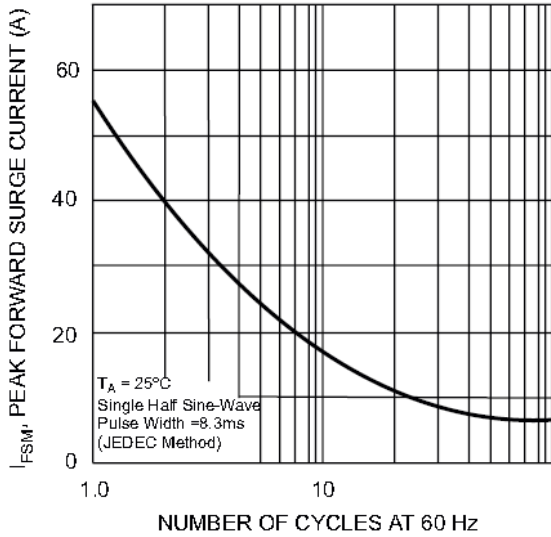
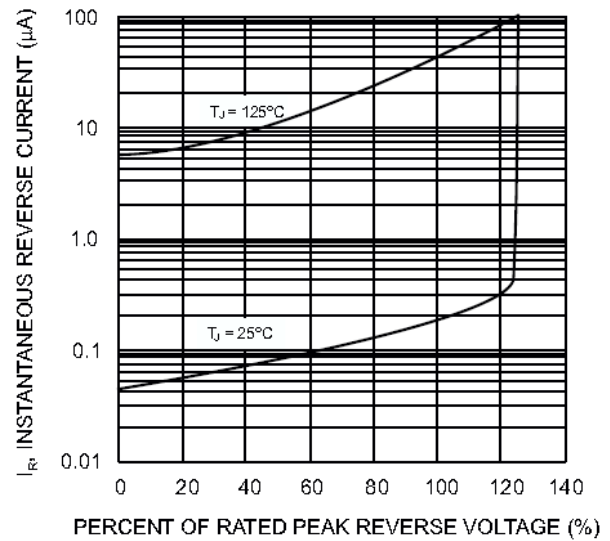


Fig. 4 Typical Reverse Characteristics (per element)





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