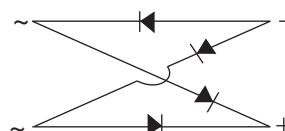


**TRR®****DB151S thru DB157S**  
**Glass Passivated Bridge Rectifiers****Features**

- Idea for printed circuit board
- Glass passivated junction chip
- High forward surge current capability
- High temperature soldering:  
260°C/10 seconds at terminals
- Component in accordance to  
RoHS 2011/65/EU

RoHS  
COMPLIANT**DB-S****Mechanical Data**

- **Case:**DB-S  
Epoxy meets UL 94 V-0 flammability rating
- **Terminals:**Plated leads, solderable per  
MIL-STD-750, Method 2026
- **Polarity:** Polarity symbols marked on body
- **Mounting Position:** Any

**Maximum Ratings & Thermal Characteristics** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	DB 151S	DB 152S	DB 153S	DB 154S	DB 155S	DB 156S	DB 157S	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS reverse 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
Maverage rectified output current @ $T_L=105^\circ\text{C}$	$I_{F(AV)}$				1.5				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$				50				A
Typical thermal resistance from junction to Lead <sup>(1)</sup>	$R_{\theta JL}$				15				$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	$T_J, T_{STG}$				-55 to +150				$^\circ\text{C}$

**Electrical Characteristics** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	DB 151S	DB 152S	DB 153S	DB 154S	DB 155S	DB 156S	DB 157S	Unit
Maximum instantaneous forward voltage at 1.5A	$V_F$				1.1				V
Maximum DC reverse current at rated DC blocking voltage per leg	$I_R$	$T_A=25^\circ\text{C}$			5.0				$\mu\text{A}$
$T_A=125^\circ\text{C}$					500				
Typical junction capacitance <sup>(2)</sup>	$C_J$				25				pF

Note:1.Units mounted on PCB with 0.51" x 0.51" (13 mm x 13 mm) copper pads

2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

**Characteristic Curves**  $T_A=25\text{ }^\circ\text{C}$  unless otherwise noted

Fig. 1 - Derating Curve Output Rectified Current

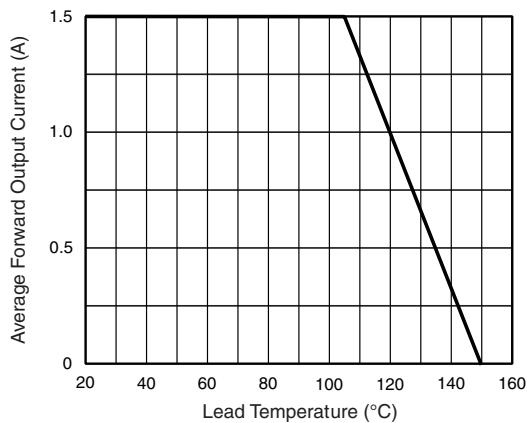


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

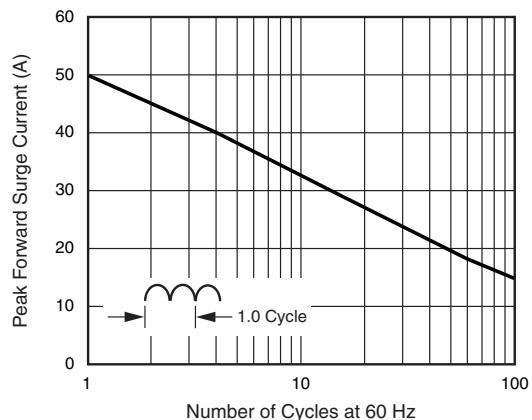


Fig. 3 - Typical Forward Characteristics Per Diode

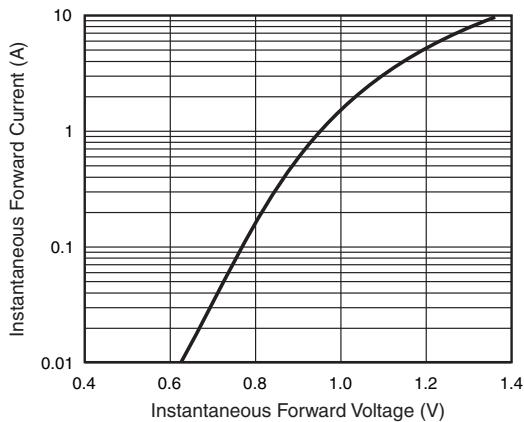
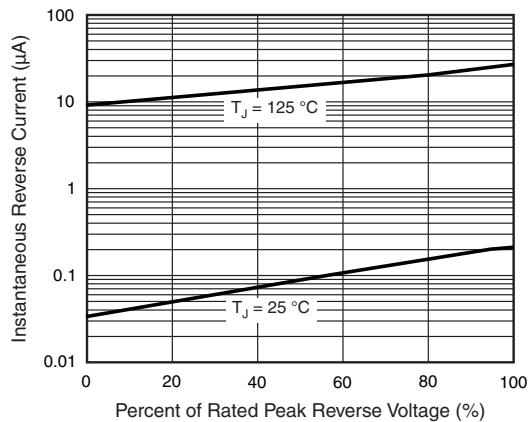
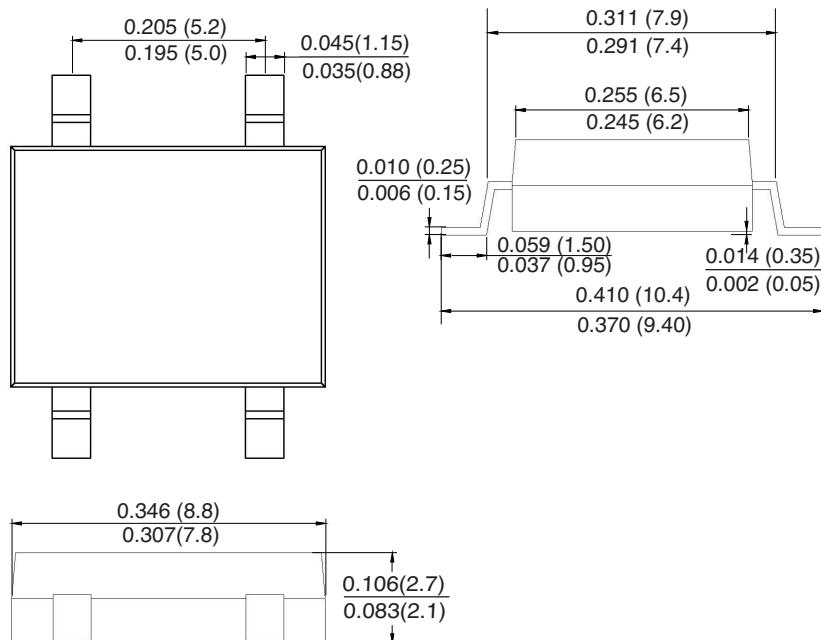
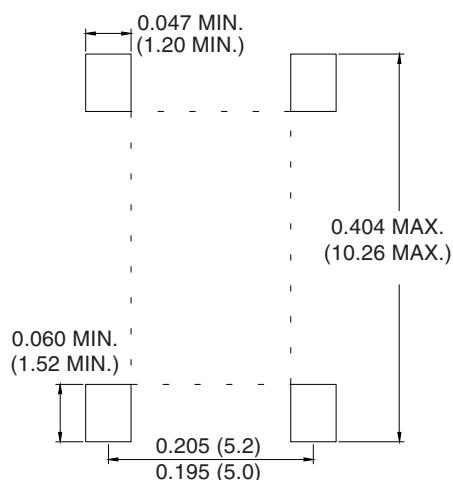


Fig. 4 - Typical Reverse Leakage Characteristics Per Diode



**TRR®****DB151S thru DB157S**  
**Glass Passivated Bridge Rectifier****Package Outline****DB-S****Mounting Pad Layout**

Dimensions in inches and (millimeters)

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