

DB151S-DB157S
Single-Phase Glass Passivated Bridge Rectifiers

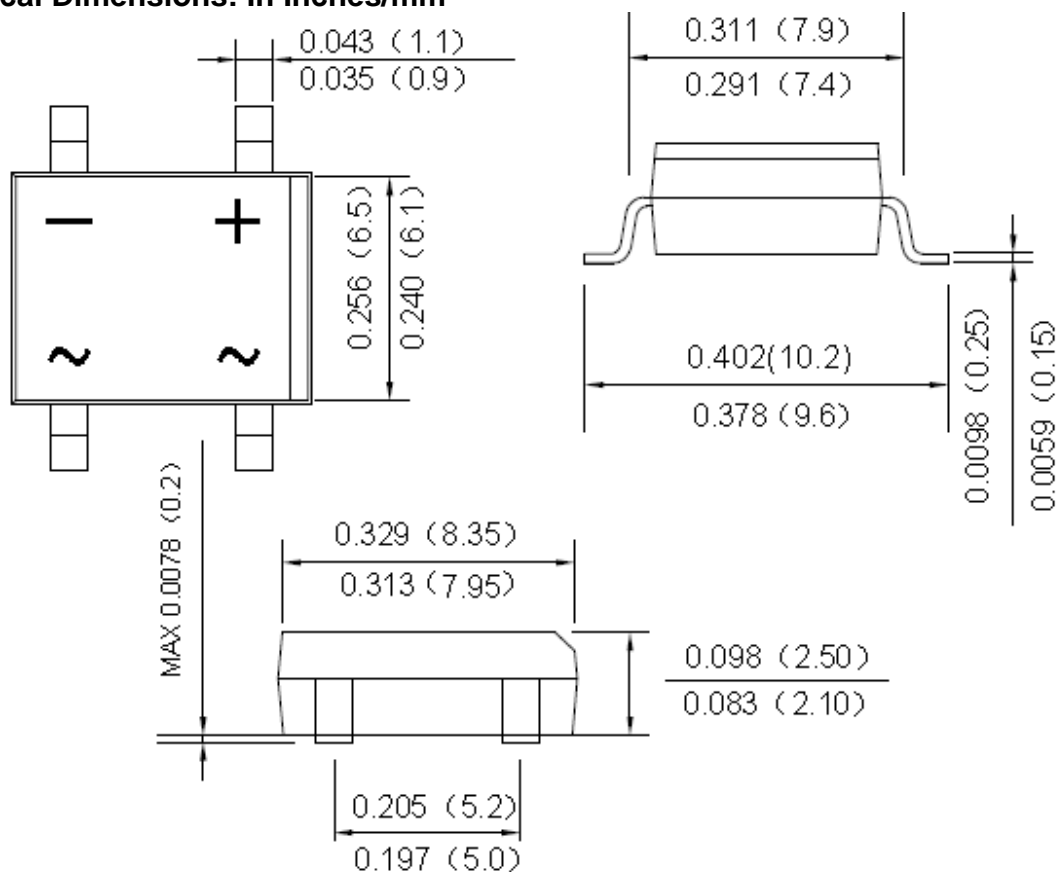
Features:

- 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

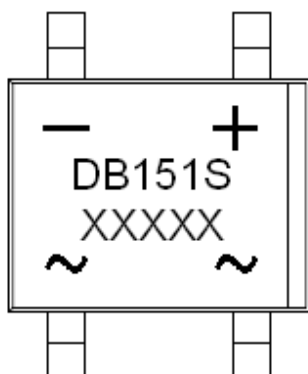
Mechanical Data:

- 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

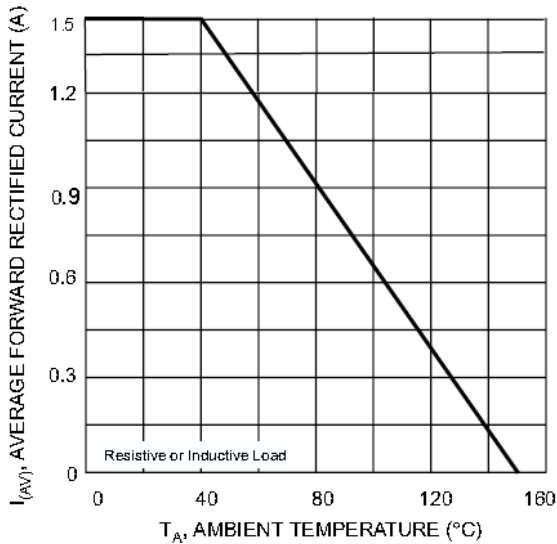


Fig. 2 Typical Forward Characteristics (per leg)

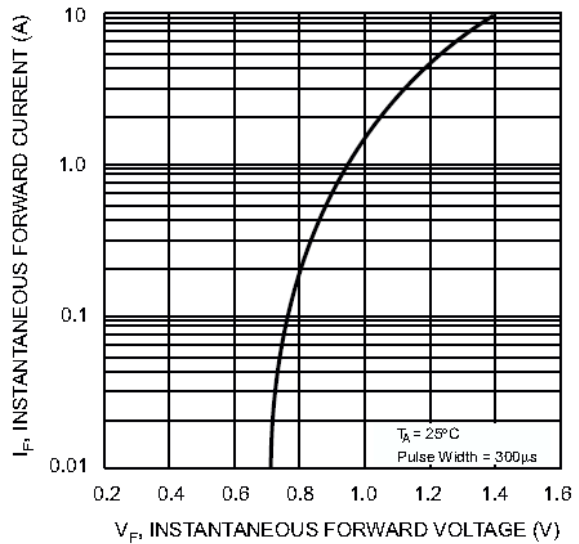


Fig. 3 Maximum Peak Forward Surge Current (per leg)

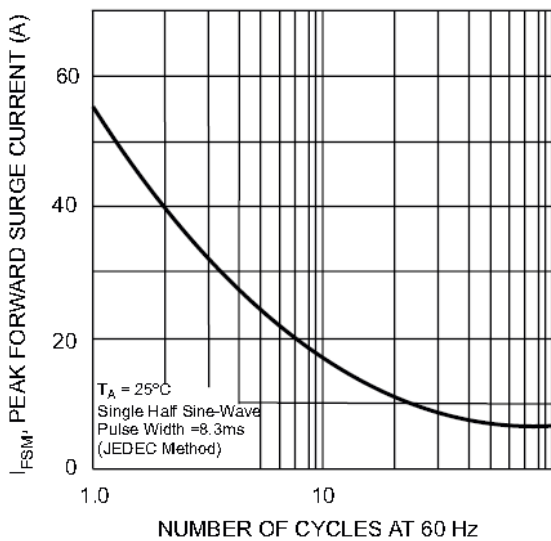
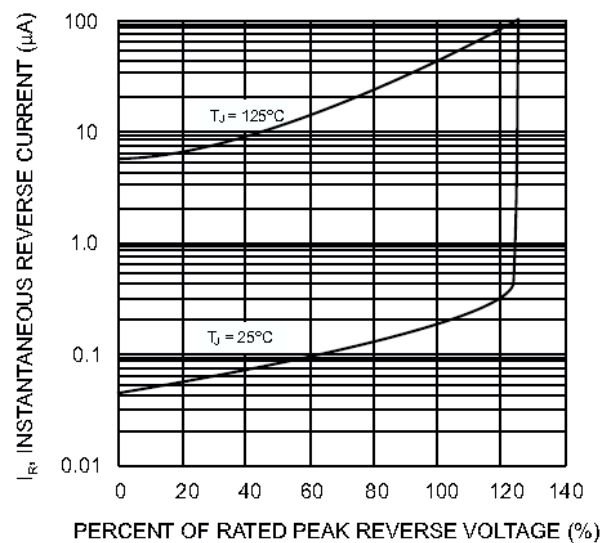


Fig. 4 Typical Reverse Characteristics (per element)





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