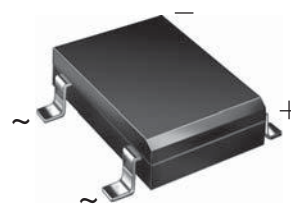


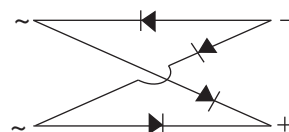
Glass Passivated Bridge Rectifier

Features

- Idea for printed circuit board
- Glass passivated junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering:
250°C/10 seconds at terminals
- Component in accordance to
RoHS 2011/65/EU



DB-S



Mechanical Date

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

Parameter	Symbol	DB 301S	DB 302S	DB 303S	DB 304S	DB 305S	DB 306S	DB 307S	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 @ $T_L=60^\circ\text{C}$	I_O	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80							A
Typical thermal resistance from junction to Lead ⁽¹⁾	$R_{\theta JL}$	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 301S	DB 302S	DB 303S	DB 304S	DB 305S	DB 306S	DB 307S	Unit
Maximum instantaneous forward voltage at 3.0A		V _F	1.1							V
Maximum DC reverse current at rated DC blocking voltage per leg	T _A =25℃	I _R	5.0							μA
	T _A =125℃		500							
Typical junction capacitance ⁽²⁾		C _J	32							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

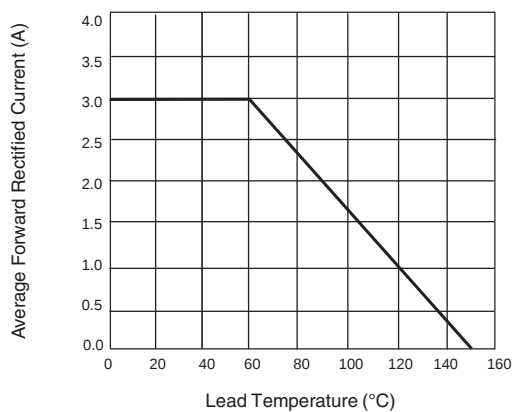


Fig.2-Maximum Non-Repetitive Peak Forward Surge Current Perleg

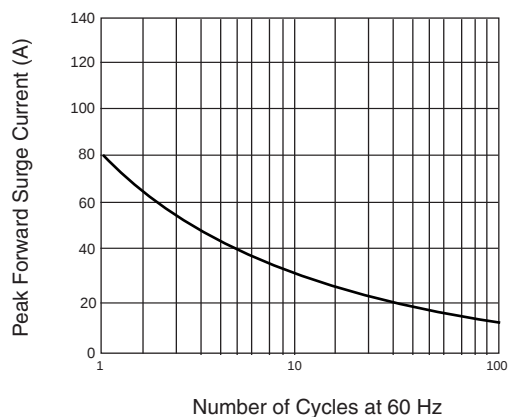


Fig.3-Typical Forward Voltage Characteristics

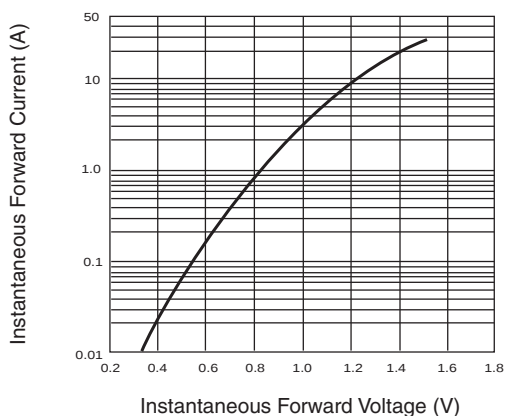
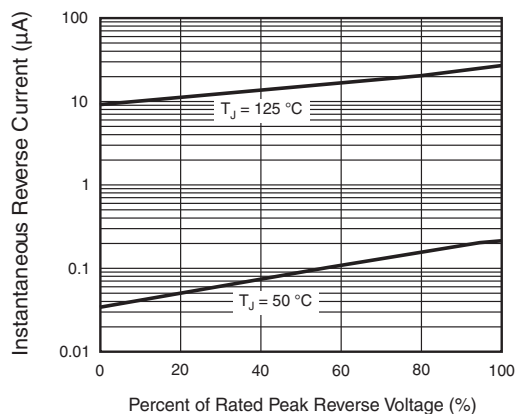
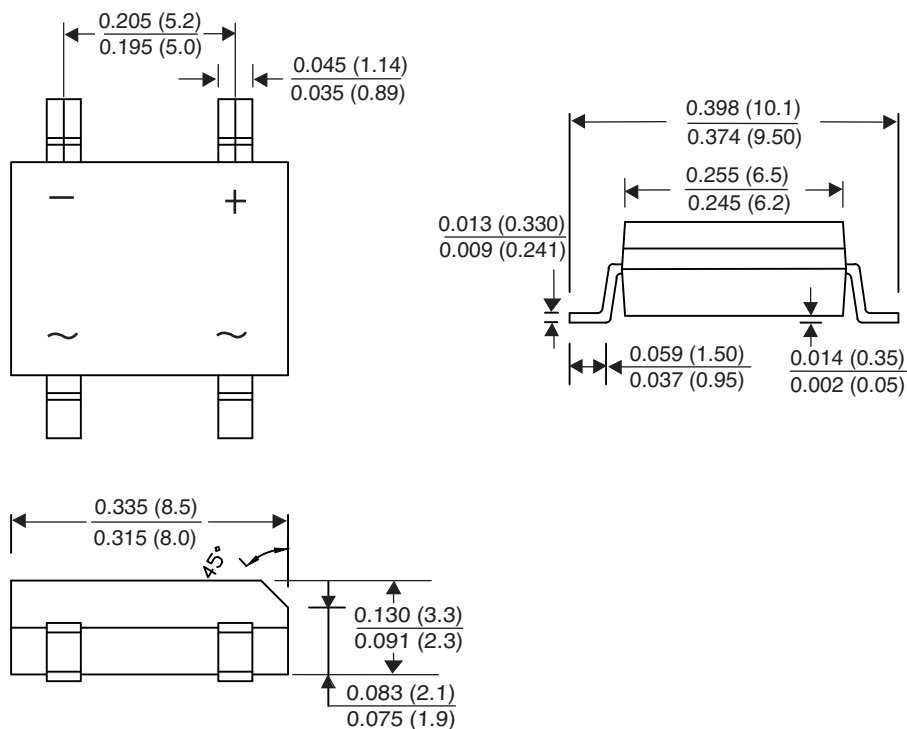


Fig.4-Typical Reverse Leakage Characteristics

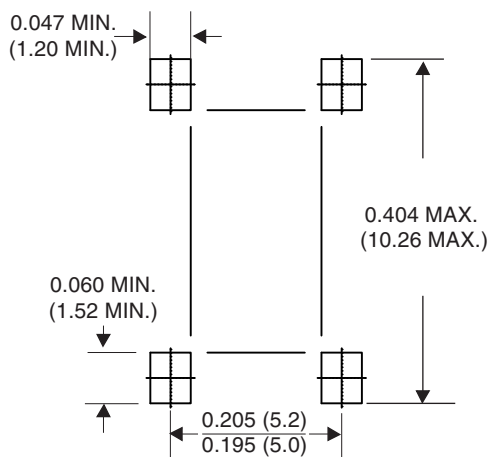


Package Outline

DB - S



Mounting Pad Layout



Dimensions in inches and (millimeters)