

Glass Passivated Bridge Rectifier

Features

- This series is UL Listed under the Recognized Component Index, file number E142814
- Ideal for printed circuit board application
- Surge overload rating to 50 amperes
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 260°C/5 seconds at 5 lbs(2.3kg) tension



RoHS
COMPLIANT

Mechanical Data

- **Case:** Molded Plastic
- **Terminals:** Plated Leads Solderable per MIL-STD-202, Method 208
- **Polarity:** Marked on body
- **Mounting Position:** Any
- **Weight:** 0.33 grams (approx)

Maximum Ratings & Thermal Characteristics (T = 25 °C unless otherwise noted)

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

For capacitive load, derate current by 20%.

Items	Symbol	DB 201S	DB 202S	DB 203S	DB 204S	DB 205S	DB 206S	DB 207S	UNIT
Peak Repetitive Reverse Voltage Maximun DC Blocking Voltage	V_{RRM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_L=90^{\circ}C$	I_O	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	50							A
Typical thermal resistance per element	$R_{\theta JA}$	40							$^{\circ}C/W$
	$R_{\theta JL}$	15							
Operating junction temperature range	T_J	-55 to +150							$^{\circ}C$
Storage temperature range	T_{STG}	-55 to +150							$^{\circ}C$

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

Electrical Characteristic (T_A = 25 °C unless otherwise noted)

Items	Test conditions		Symbol	Min	Type	Max	UNIT
Instantaneous forward voltage per leg	I _F =2.0A ⁽²⁾		V _F	-	-	1.1	V
Reverse current	V _R =V _{DC}	T _A =25°C	I _R	-	-	5	μA
		T _A =125°C		-	-	500	

Note 2: Pulse test: 300μs pulse width, 1% duty cycle.

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

Fig.1 Forward Current Derating Curve

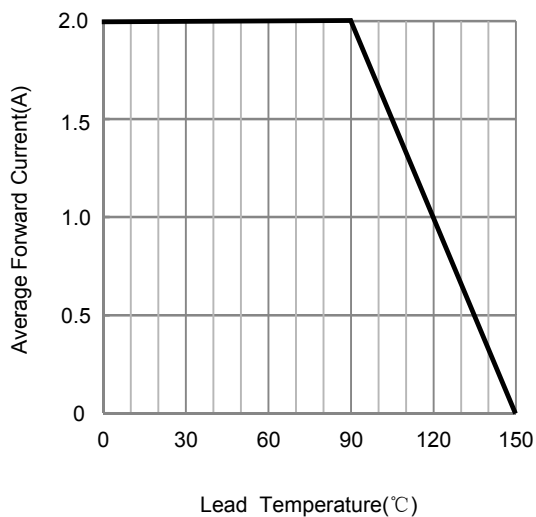


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

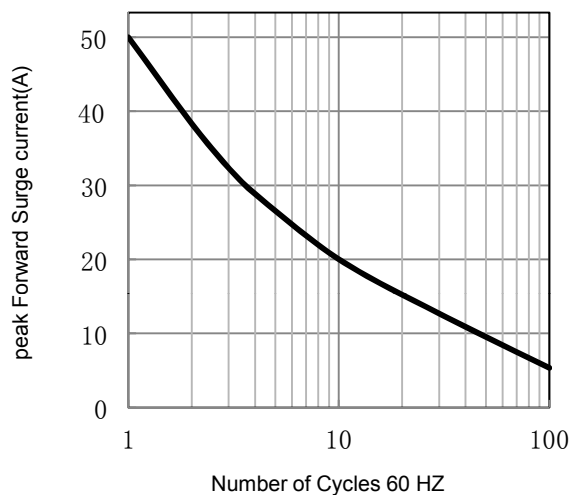


Fig.3 Typical Instantaneous Forward Characteristics

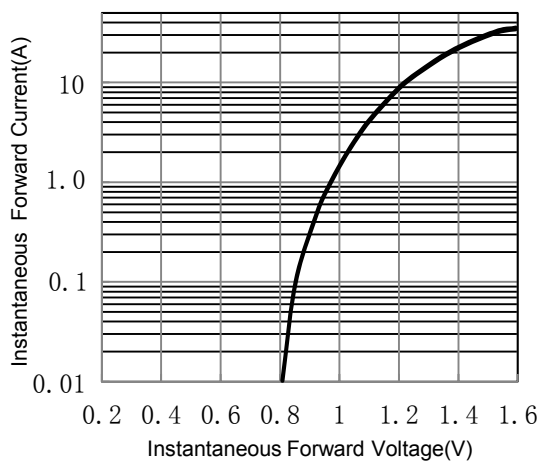
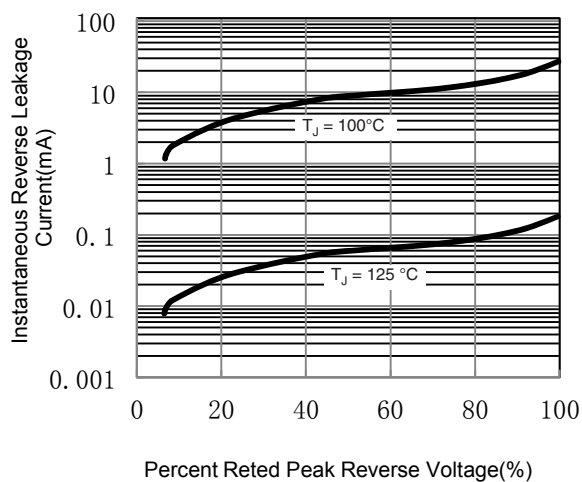
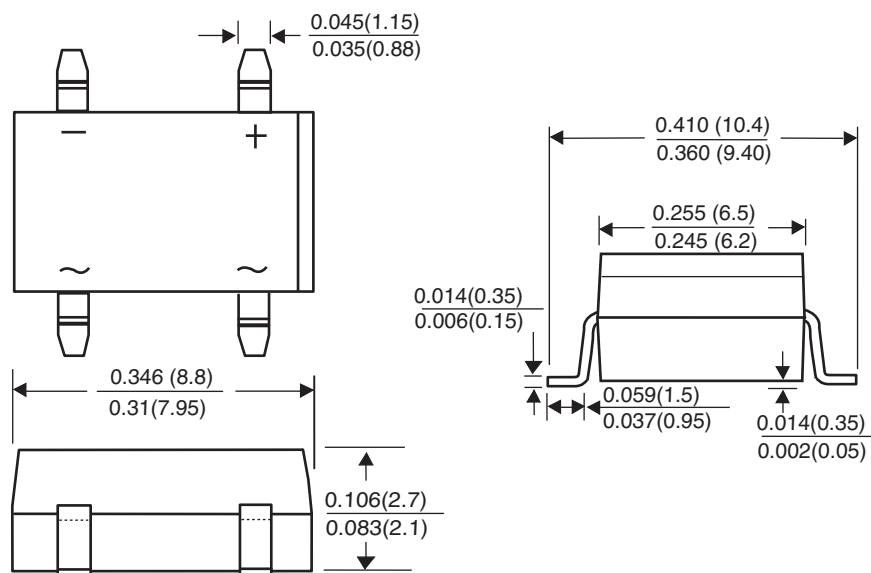


Fig.4 Typical Reverse Leakage Characteristics



Package Outline

DB-S



Mounting Pad Layout

