

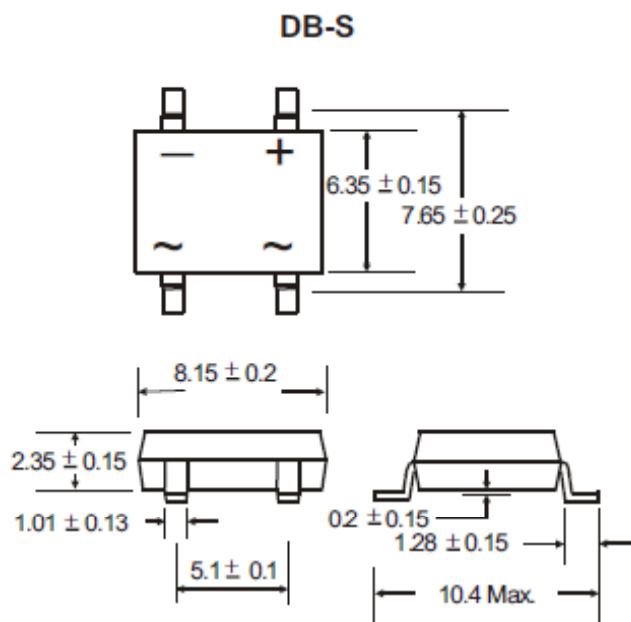
Glass Passivated Bridge Rectifier

Features

- Glass Passivated Die Construction
- Low leakage
- Ideal for printed circuit board application
- Surge overload rating-30A peak
- Designed for Surface Mount Application
- Plastic Material – UL Flammability 94V-O

Mechanical Data

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



Dimensions in millimeters (1mm =0.0394")

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

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

For capacitive load, derate current by 20%.

Items	Symbol	DB 101S	DB 102S	DB 103S	DB 104S	DB 105S	DB 106S	DB 107S	UNIT
Peak Repetitive Reverse Voltage Maximum 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 @TA=40°C	I_O	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	30							A
Thermal resistance from junction to lead per leg ⁽¹⁾	$R_{\theta JL}$	15							°C / W
Thermal resistance from junction to ambient per leg ⁽¹⁾	$R_{\theta JA}$	110							°C / W
Operating junction temperature range	T_J	-55 to +150							°C
Storage temperature range	T_{STG}	-55 to +150							°C

Note 1: Mounted on glass epoxy PC board with 1.3mm² solder pad.

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

Items	Test conditions		Symbol	Min	Type	Max	UNIT
Instantaneous forward voltage per leg	$I_F=1.0A^{(2)}$		V_F	-	-	1.1	V
Reverse current	$V_R=V_{DC}$	$T_A=25^{\circ}C$	I_R	-	-	5	μA
		$T_A=125^{\circ}C$		-	-	500	

Note2: Pulse test:300μs pulse width,1% duty cycle.

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

Fig. 1 Derating Curve for Output Rectified Current

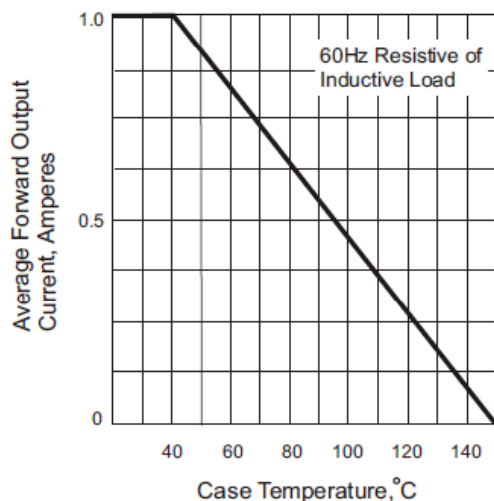


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

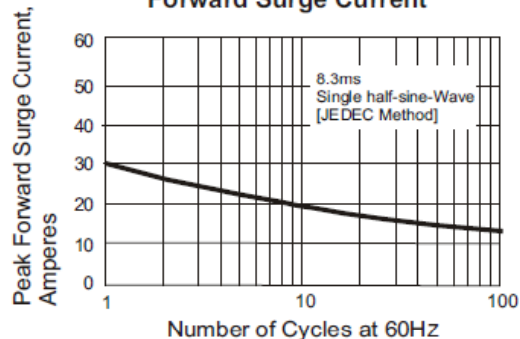


Fig. 4 Typical Revers Characteristics

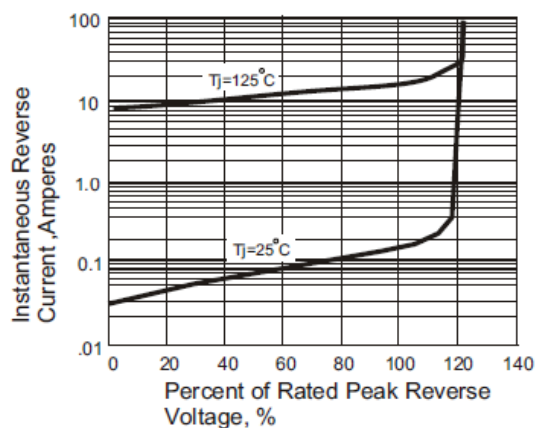


Fig. 3 Typical Instantaneous Forward Characteristics

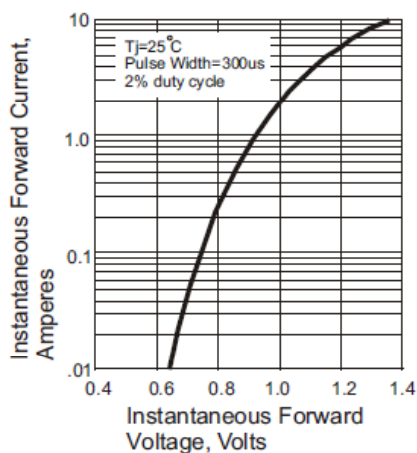


Fig. 5 Typical Junction Capacitance

