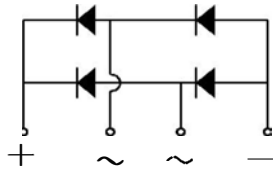
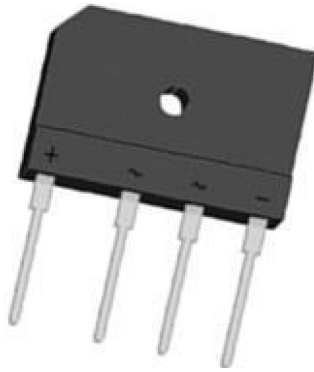


Glass Passivated Bridge Rectifiers



Features

- Compliant with RoHS Provisions
- Low forward voltage, high forward current
- High forward surge current capability
- High heat-conducting performance
- Thermal welding performance:
260 °C/10sec

Applications

- Switching Power Supply
- Home Appliances, Office Devices
- Industrial Auto-equipments

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbol	GBJ5010	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average Rectified Output Current	I_O	50.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load(JEDEC Method)	I_{FSM}	500	A
$I^2 t$ rating for fusing (1ms < t < 10ms)	$I^2 t$	1037	A ² S
Maximum Forward Voltage at 25A	V_F	1.1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	10 500	μ A
Junction to ambient , without heatsink @ $T_A=25\text{ }^\circ\text{C}$ Junction to case, with heatsink @ $T_A=125\text{ }^\circ\text{C}$	$R_{\theta JA}$ $R_{\theta JC}$	22 0.8	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +175	$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

FIG1:Io-Tc Curve

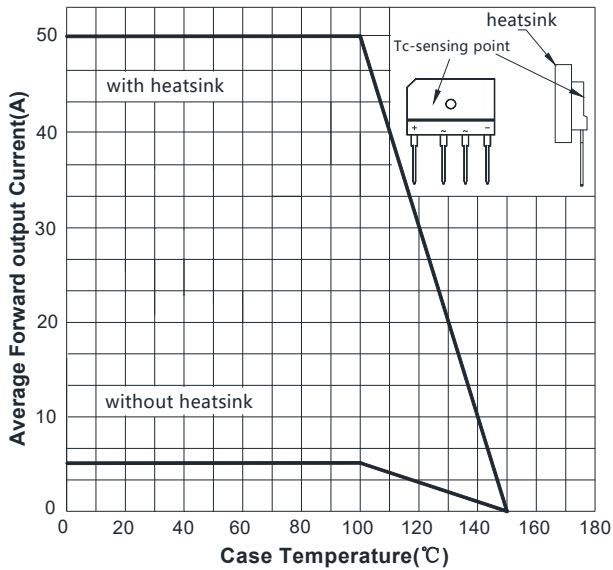


FIG2:Surge Forward Current Capability

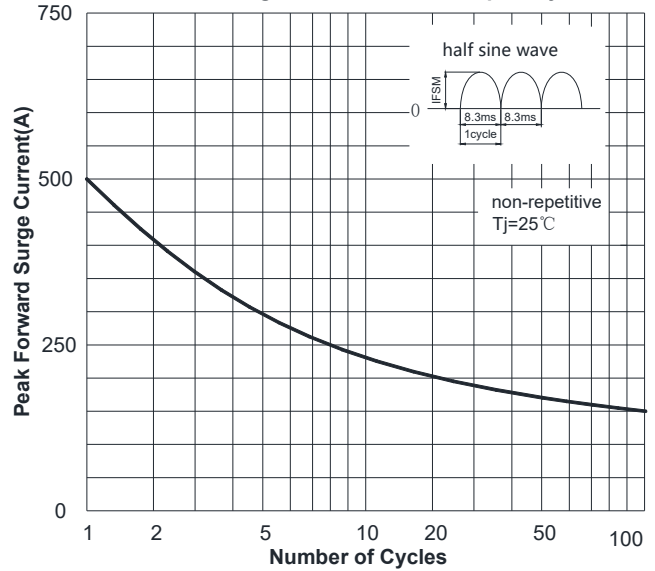


FIG3: Typical Forward Voltage

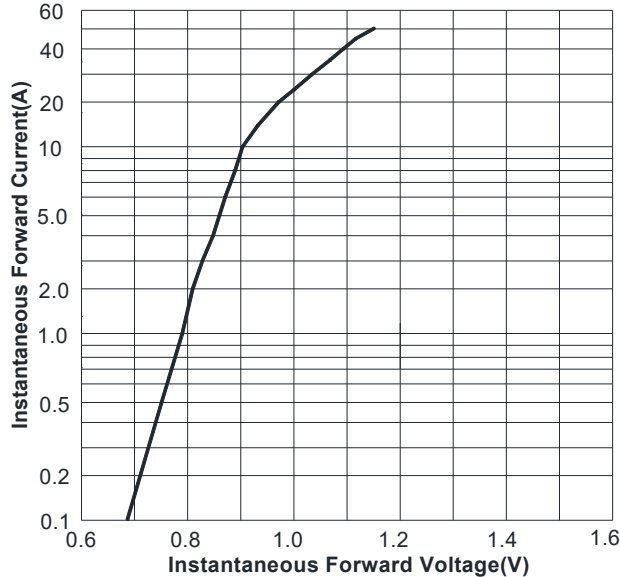
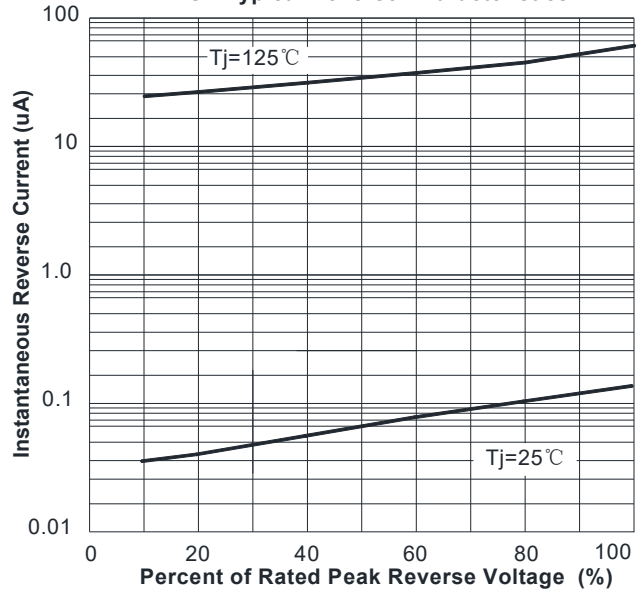
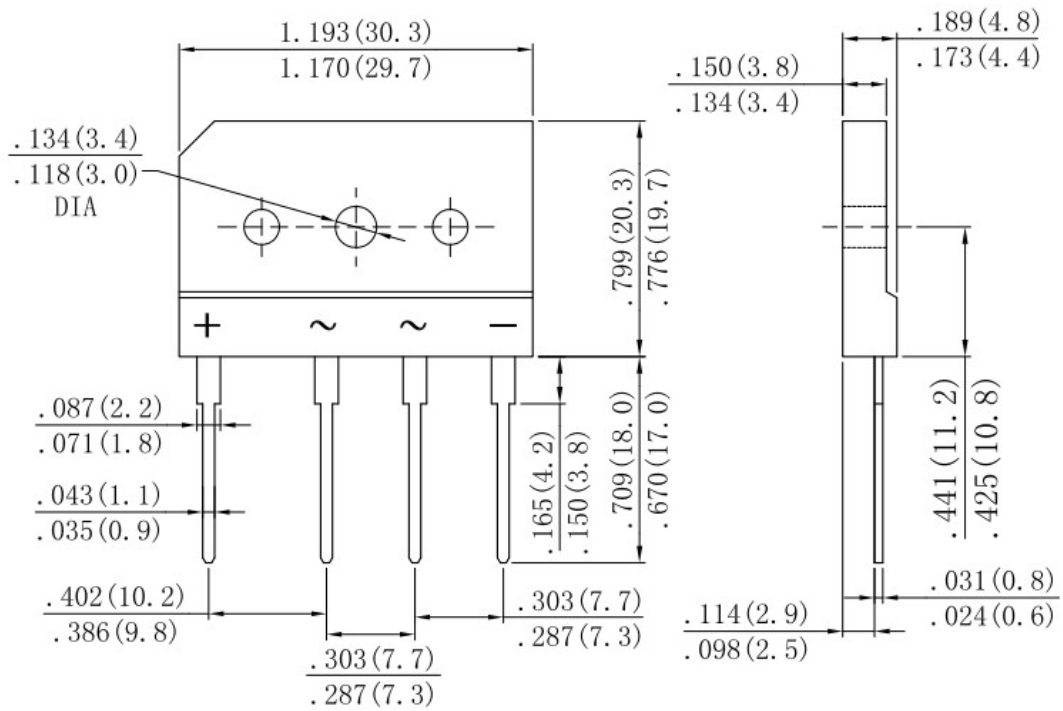


FIG4:Typical Reverse Characteristics



PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)



Dimensions in inches and(millimeters)