

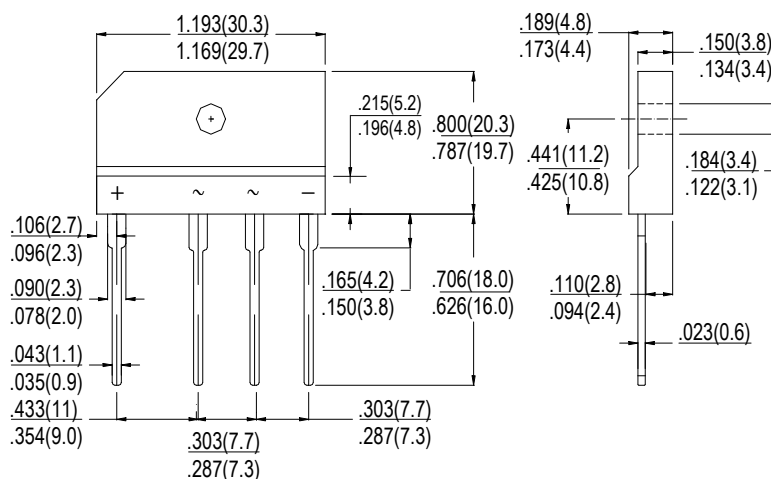
GBJ50005 THRU GBJ5010

SINGLE PHASE 50.0 AMP GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

GBJ



Mechanical Data

- Case: Molded plastic, GBJ
- 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

dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBJ 50005	GBJ 5001	GBJ 5002	GBJ 5004	GBJ 5006	GBJ 5008	GBJ 5010	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
	V _{RWM}								
	V _{DC}								
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current (with heatsink) (Note 1)@T _C =100 °C (without heatsink)	I _O	50.0 3.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	450							A
Forward Voltage per element @I _F =25A	V _{FM}	1.1							V
Peak Reverse Current @T _A =25 °C At Rated DC Blocking Voltage @T _A =125 °C	I _R	5.0 500							uA
Typical Junction Capacitance per leg	C _J	75							pF
Between junction and ambient, Without heatsink	R _{θJA}	22							°C/W
Between junction and case, With heatsink	R _{θJC}	0.8							
Operating and Storage Temperature Range	T _J , T _{STG}	-55to+150							°C

NOTES: 1.Device mounted on 300mm*300mm*1.6mm cu plate heatsink.

Fig. 1 Output Current Derating Curve

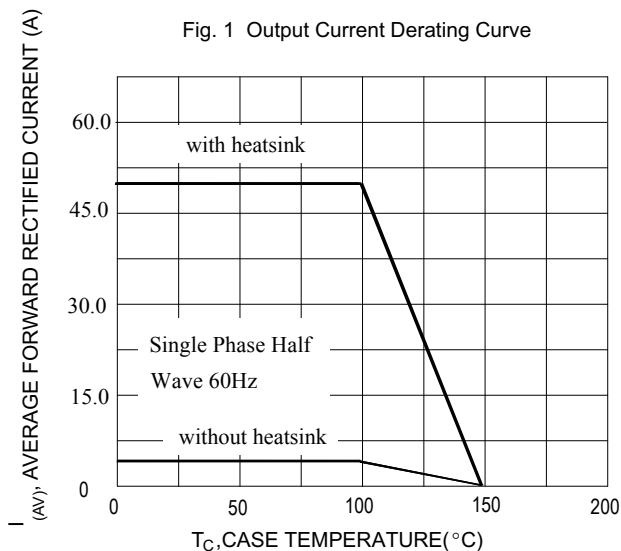


Fig. 2 Typical Forward Characteristics (per leg)

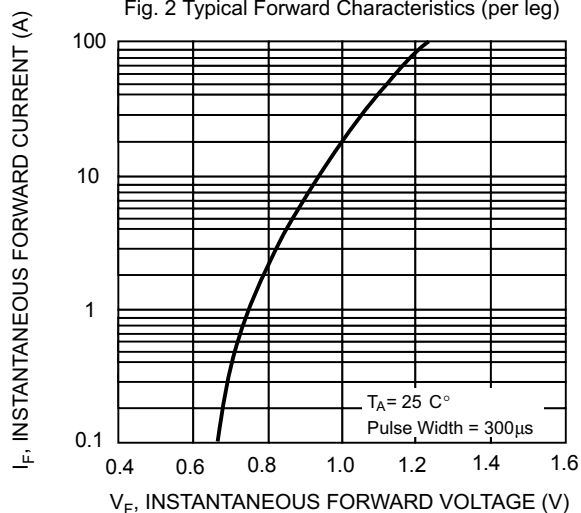


Fig. 3 Maximum Peak Forward Surge Current (per leg)

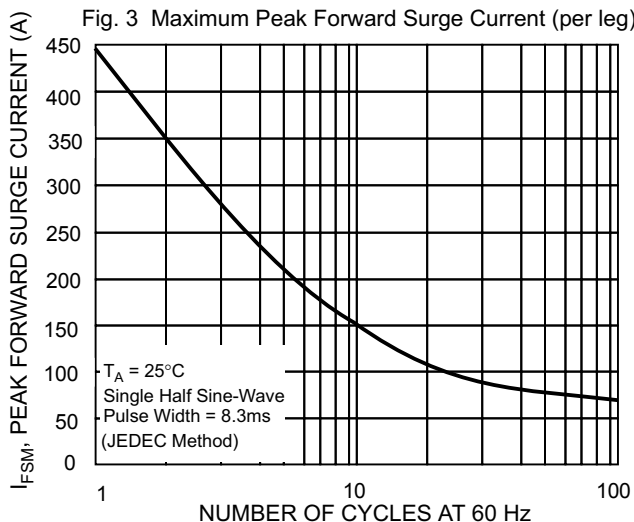


Fig. 4 Typical Junction Capacitance

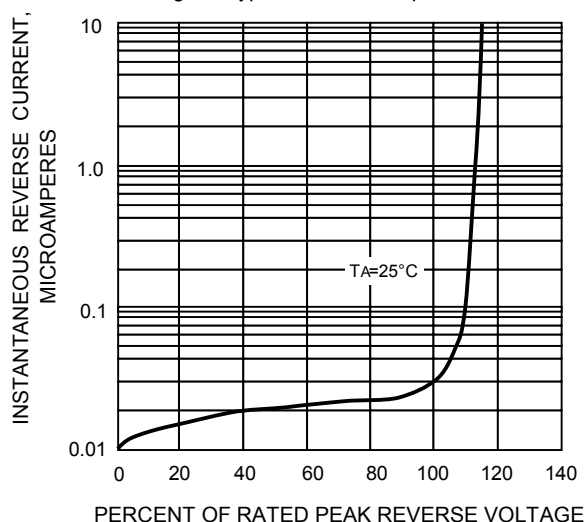


FIG.5 TYPICAL REVERSE CHARACTERISTICS

