

# GBJ50005 THRU GBJ5010

## SINGLE PHASE 50.0 AMP BRIDGE RECTIFIERS



### FEATURES

- \* Ideal for printed circuit board
- \* Low forward voltage
- \* Low leakage current
- \* Mounting position: Any

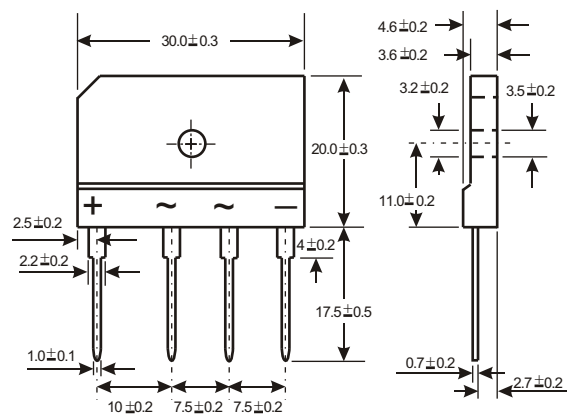
### VOLTAGE RANGE

50 to 1000 Volts

### CURRENT

50.0 Amperes

### GBJ



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	GBJ50005	GBJ5001	GBJ5002	GBJ5004	GBJ5006	GBJ5008	GBJ5010	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2)	50.0							A
.375"(9.5mm) Lead Length at Tc=100°C (Without heatsink)	5.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	400							A
Maximum Forward Voltage Drop per Bridge Element at 25A D.C.	1.2							V
Maximum DC Reverse Current Ta=25°C	10							uA
at Rated DC Blocking Voltage Ta=125°C	500							uA
Typical Junction Capacitance (Note 1)	85							PF
Typical Thermal Resistance R <sub>jc</sub> (Note 2)	0.6							°C/W
Operating Temperature Range, T <sub>J</sub>	-55 — +150							°C
Storage Temperature Range, T <sub>stg</sub>	-55 — +150							°C

#### NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance from Junction to Case with device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES (GBJ50005 THRU GBJ5010)

FIG.1-TYPICAL FORWARD CURRENT  
DERATING CURVE

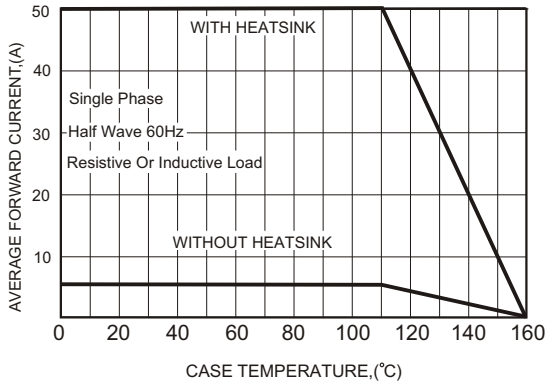


FIG.2-MAXIMUM NON-REPETITIVE FORWARD  
SURGE CURRENT

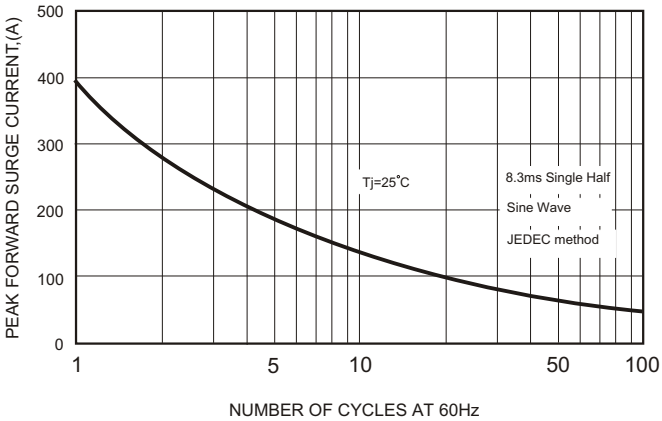


FIG.3-TYPICAL FORWARD  
CHARACTERISTICS

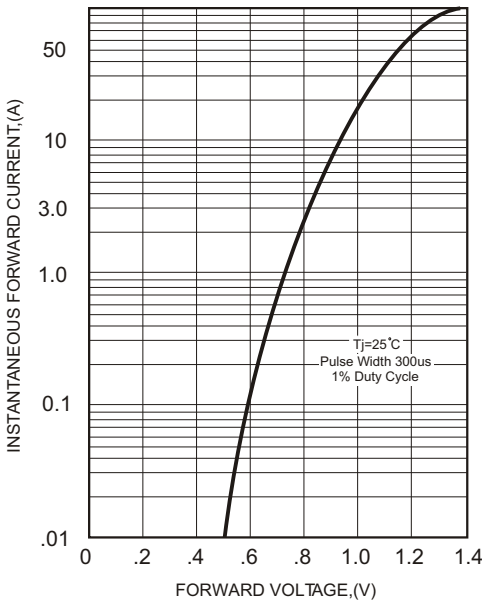


FIG.4-TYPICAL REVERSE  
CHARACTERISTICS

