



# FGBU2004 THRU FGBU2010

SINGLE PHASE 20.0 AMP BRIDGE RECTIFIERS



## FEATURES

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

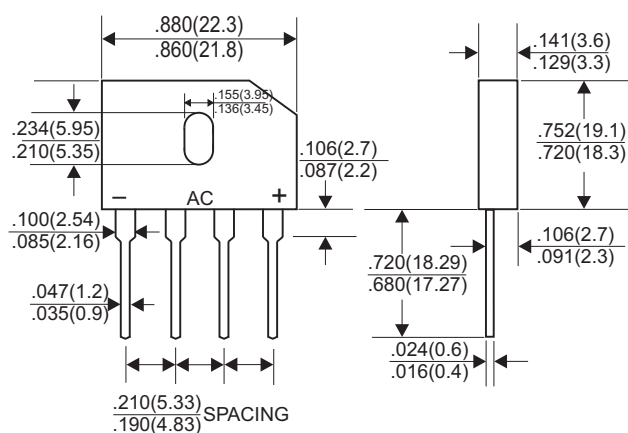
## VOLTAGE RANGE

400 to 1000 Volts

## CURRENT

20.0 Amperes

## GBU



Dimensions in inches and (millimeters)

## 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                                                                                        | FGBU2004   | FGBU2006 | FGBU2010 | UNITS |
|----------------------------------------------------------------------------------------------------|------------|----------|----------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                             | 600        | 800      | 1000     | V     |
| Maximum RMS Voltage                                                                                | 420        | 560      | 700      | V     |
| Maximum DC Blocking Voltage                                                                        | 600        | 800      | 1000     | V     |
| Maximum Average Forward                                                                            | 20.0       |          |          | A     |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 250        |          |          | A     |
| Maximum Forward Voltage Drop per Bridge Element at 10.0A D.C.                                      | 1.25       |          |          | V     |
| Maximum DC Reverse Current Ta=25°C                                                                 | 5          |          |          | μA    |
| at Rated DC Blocking Voltage Ta=125°C                                                              | 500        |          |          | μA    |
| Maximum Reverse Recovery Time (Note 1)                                                             | 150        | 200      | 500      | nS    |
| Typical Junction Capacitance (Note 2)                                                              | 85         |          |          | PF    |
| Typical Thermal Resistance R <sub>jc</sub> (Note 3)                                                | 2.2        |          |          | °C/W  |
| Operating Temperature Range, T <sub>J</sub>                                                        | -55 — +150 |          |          | °C    |
| Storage Temperature Range, T <sub>stg</sub>                                                        | -55 — +150 |          |          | °C    |

### NOTES:

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal Resistance from Junction to Case with device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES (FGBU2004 THRU FGBU2010)

FIG.1-TYPICAL FORWARD CURRENT  
DERATING CURVE

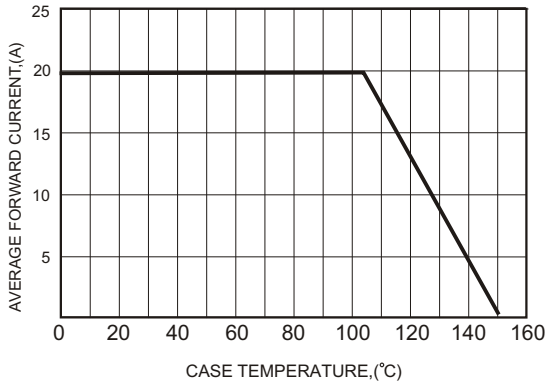


FIG.2-MAXIMUM NON-REPETITIVE FORWARD  
SURGE CURRENT

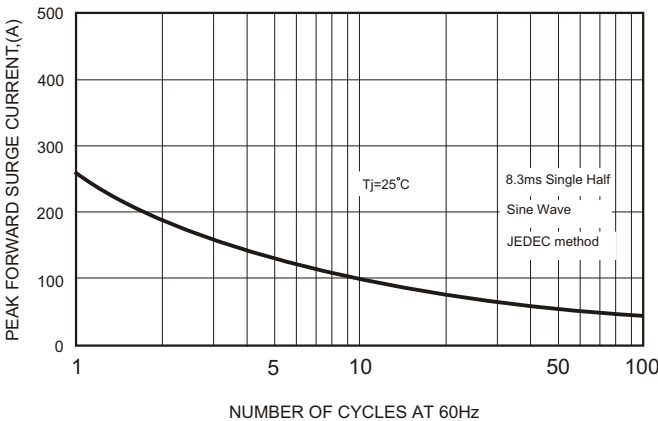


FIG.3-TYPICAL FORWARD  
CHARACTERISTICS

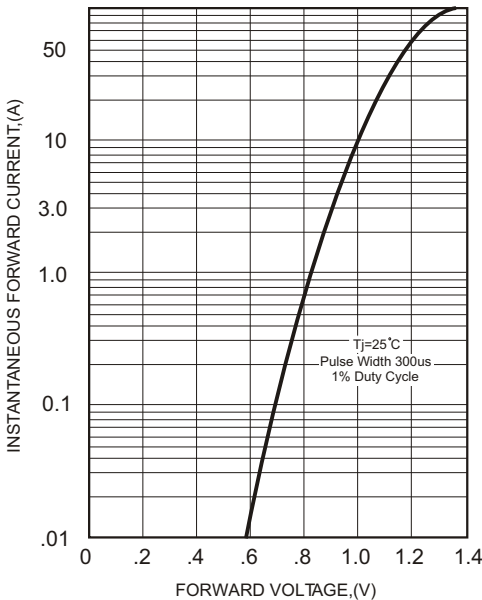


FIG.4-TYPICAL REVERSE  
CHARACTERISTICS

