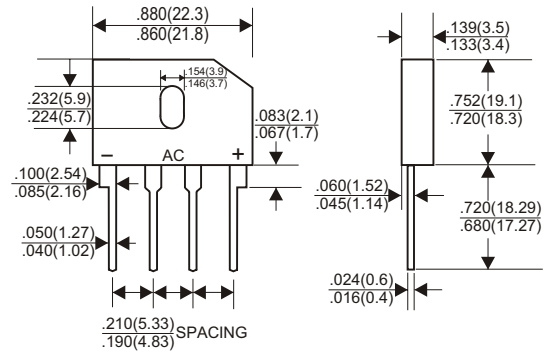


SINGLE PHASE 30 AMP BRIDGE RECTIFIERS

GBU

Features:

- Surge overload rating -350 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L flammability classification 94V-0
- Mounting position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25. ambient temperature unless otherwise specified.
 Single phase, half wave ,60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

| CHARACTERISTICS | SYMBOL | GBU 30005 | GBU 3001 | GBU 3002 | GBU 3004 | GBU 3006 | GBU 3008 | GBU 3010 | UNIT | |
|--|-------------------|-------------|----------|----------|----------|----------|----------|----------|------|------------------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum Average Forward (with heatsink Note 2) Rectified Current @ T _c =100°C (without heatsink) | I _(AV) | 30.0 4.5 | | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | I _{FSM} | 350 | | | | | | | | A |
| Maximum Forward Voltage at 15.0A DC | V _F | 1.0 | | | | | | | | V |
| Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =125°C | I _R | 5.0 300 | | | | | | | | μA |
| I ² t Rating for Fusing (t<8.3ms) | I ² t | 500 | | | | | | | | A ² s |
| Typical Junction Capacitance Per Element (Note1) | C _J | 70 | | | | | | | | pF |
| Typical Thermal Resistance | R _{θJC} | 2.2 | | | | | | | | °C/W |
| Operating Temperature Range | T _J | -55 to +150 | | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | | | °C |

NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 2.Device mounted on 100mm*100mm*1.6mm Cu plate heatsink

FIG.1-MAXIMUM FORWARD SURGE CURRENT

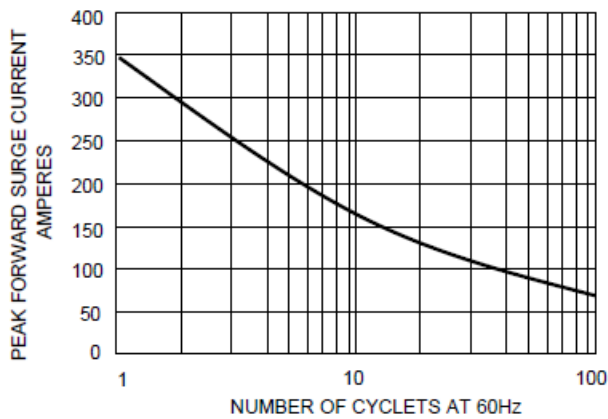


FIG.2- DERATING CURVE
 OUTPUT RECTIFIED CURRENT

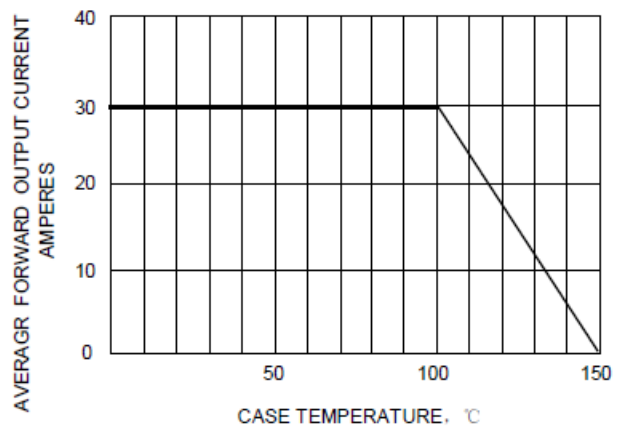


FIG.3-TYPICAL FORWARD CHARACTERISTICS

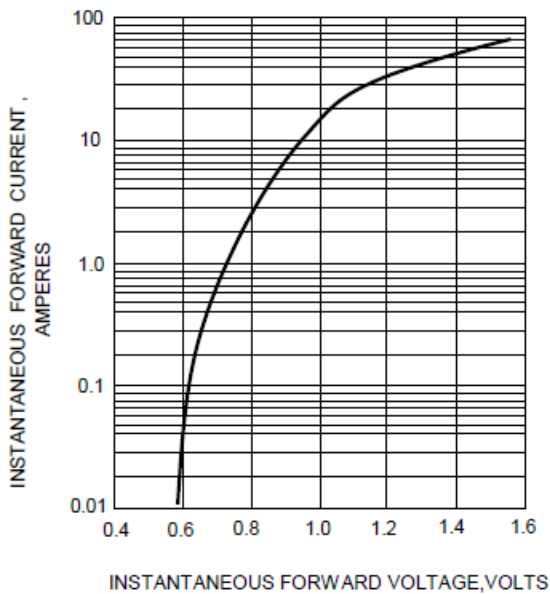


FIG.4-TYPICAL REVERSE CHARACTERISTICS

