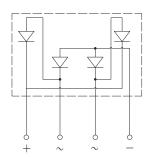




Low VF Bridge Rectifiers





Features

- UL recognition, file #E230084
- Glass passivated chip junction
- Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.

Mechanical Data

• Package: 6KBJ

Molding compound meets UL 94 V-0 flammability

rating, RoHS-compliant

• Terminals: Tin plated leads, solderable per

J-STD-002 and JESD22-B102

• Polarity: As marked on body

■Maximum Ratings (T_a=25°C Unless otherwise specified)

| ■Maximum Ratings (Ta=25 C Uniess otherwise specified) | | | | | | |
|---|------------------------------|------------------|------------------|------------|--|--|
| PARAMETER | | SYMBOL | UNIT | GBJL3508 | | |
| Device marking code | | | | GBJL3508 | | |
| Maximum Repetitive Peak Reverse Voltage | | VRRM | V | 800 | | |
| Maximum RMS Voltage | | VRMS | V | 560 | | |
| Maximum DC blocking Voltage | | VDC | V | 800 | | |
| Average rectified output current @60Hz sine wave, R-load | With heatsink Tc =85°C | - IO | A | 35.0 | | |
| | Without heatsink Ta =25°C | | | 3.5 | | |
| Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25°C | | - IFSM | А | 450 | | |
| Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C | | | | 900 | | |
| Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode | | l ² t | A ² S | 840 | | |
| Storage temperature | | T _{stg} | °C | -55 ~ +150 | | |
| Junction temperature | | Тј | °C | -55 ~ +150 | | |
| Dielectric strength @ terminals to case, AC 1 minute | | Vdis | KV | 2.5 | | |
| Mounting torque @recommend torque: 5kg·cm | | Tor | kg⋅cm | 8 | | |



■Electrical Characteristics (Ta=25°C Unless otherwise specified)

| | | | • | | |
|---|--------|----------|---|----------|--|
| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | GBJL3508 | |
| Maximum instantaneous forward voltage drop per diode | VF | V | IFM=17.5A | 0.95 | |
| Maximum DC reverse current at rated DC blocking voltage per diode | lR | μА | T _j =25°C | 5 | |
| | | | T _j =125°C | 200 | |
| Typical junction capacitance | Cj | pF | Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C | | |

■Thermal Characteristics $(T_a=25 \degree C \text{ Unless otherwise specified})$

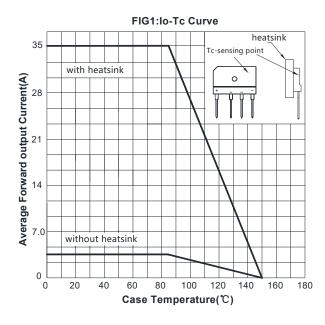
| PARAMETER | | SYMBOL | UNIT | GBJL3508 |
|-------------------------------|--|--------------------|------|----------|
| Typical Thermal Resistance | Between junction and ambient, Without heatsink | R ₀ J-A | °C/W | 18.0 |
| | Between junction and case, With heatsink | RøJ-C | | 1.0 |

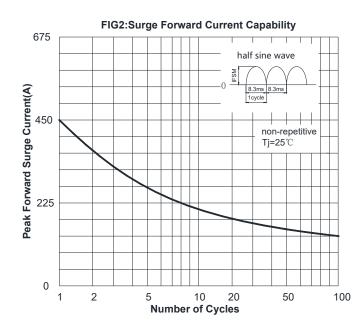
Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■Ordering Information (Example)

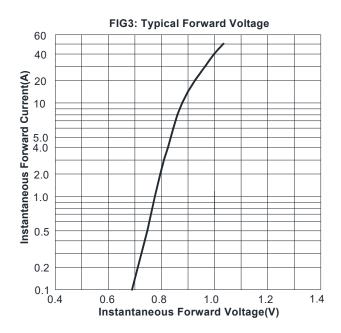
| PREFERED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|--------------|-----------------|-----------------|--------------------------|-------------------------|----------------------------|---------------|
| GBJL3508 | B1 | Approximate 6.5 | 15 | 750 | 1500 | TUBE |

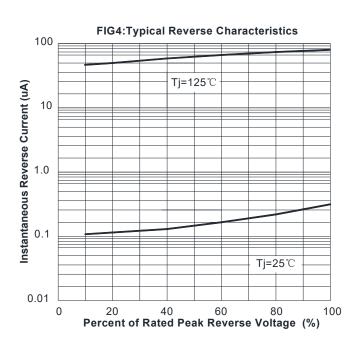
■ Characteristics(Typical)



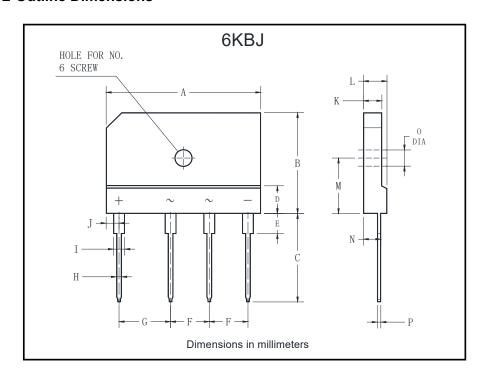








■ Outline Dimensions



| 6KBJ | | | | | |
|------|------|------|--|--|--|
| Dim | Min | Max | | | |
| Α | 29.7 | 30.3 | | | |
| В | 19.7 | 20.3 | | | |
| С | 17.0 | 18.0 | | | |
| D | 4.8 | 5.8 | | | |
| Е | 3.8 | 4.2 | | | |
| F | 7.3 | 7.7 | | | |
| G | 9.8 | 10.2 | | | |
| Н | 0.9 | 1.1 | | | |
| I | 2.0 | 2.4 | | | |
| J | 2.3 | 2.7 | | | |
| K | 3.4 | 3.8 | | | |
| L | 4.4 | 4.8 | | | |
| М | 10.8 | 11.2 | | | |
| Ν | 3.1 | 3.7 | | | |
| 0 | 3.1 | 3.4 | | | |
| Р | 0.6 | 0.8 | | | |
| | | | | | |



GBJL3508

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