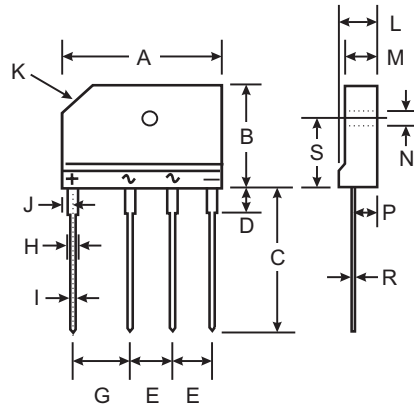


Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500V_{RMS}
- Low Reverse Leakage Current
- Surge Overload Rating to 170A Peak
- Ideal for Printed Circuit Board Applications
- UL Listed Under Recognized Component Index, File Number E94661
- **Lead Free Finish/RoHS Compliant (Note 4)**

Mechanical Data

- Case: GBJ
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Lead Free Plating (Tin Finish).
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208 (e3)
- Polarity: Molded on Body
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 in-lbs Maximum
- Marking: Type Number
- Weight: 6.6 grams (approximate)



| GBJ | | |
|----------------------|-----------|-------|
| Dim | Min | Max |
| A | 29.70 | 30.30 |
| B | 19.70 | 20.30 |
| C | 17.00 | 18.00 |
| D | 3.80 | 4.20 |
| E | 7.30 | 7.70 |
| G | 9.80 | 10.20 |
| H | 2.00 | 2.40 |
| I | 0.90 | 1.10 |
| J | 2.30 | 2.70 |
| K | 3.0 X 45° | |
| L | 4.40 | 4.80 |
| M | 3.40 | 3.80 |
| N | 3.10 | 3.40 |
| P | 2.50 | 2.90 |
| R | 0.60 | 0.80 |
| S | 10.80 | 11.20 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

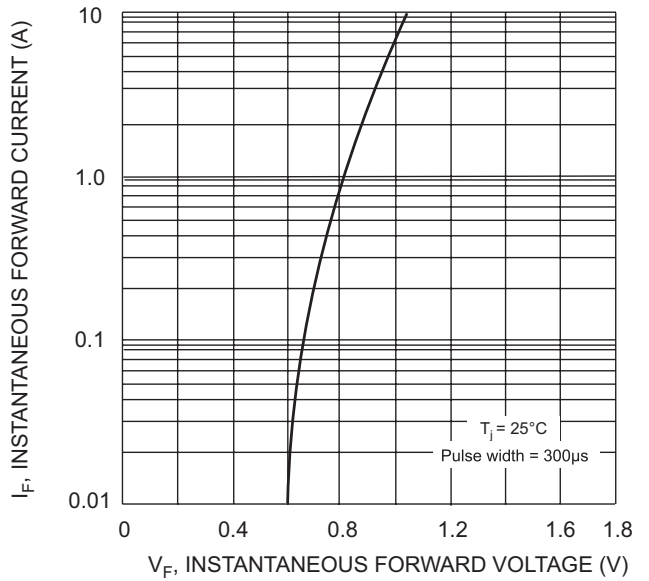
Single phase, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| Characteristic | Symbol | GBJ 6005 | GBJ 601 | GBJ 602 | GBJ 604 | GBJ 606 | GBJ 608 | GBJ 610 | Unit |
|--|--|-------------|---------|---------|---------|---------|---------|---------|------------------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V _{RRM} V _{RWM} V _R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Forward Rectified Output Current @ T _C = 110°C | I _O | 6.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load | I _{FSM} | 170 | | | | | | | A |
| Forward Voltage per element @ I _F = 3.0A | V _{FM} | 1.0 | | | | | | | V |
| Peak Reverse Current at Rated DC Blocking Voltage @ T _C = 25°C @ T _C = 125°C | I _R | 5.0 500 | | | | | | | μA |
| I ² t Rating for Fusing (t < 8.3ms) (Note 1) | I ² t | 120 | | | | | | | A ² s |
| Typical Total Capacitance per Element (Note 2) | C _T | 55 | | | | | | | pF |
| Typical Thermal Resistance Junction to Case (Note 3) | R _{θJC} | 1.8 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _J , T _{STG} | -65 to +150 | | | | | | | °C |

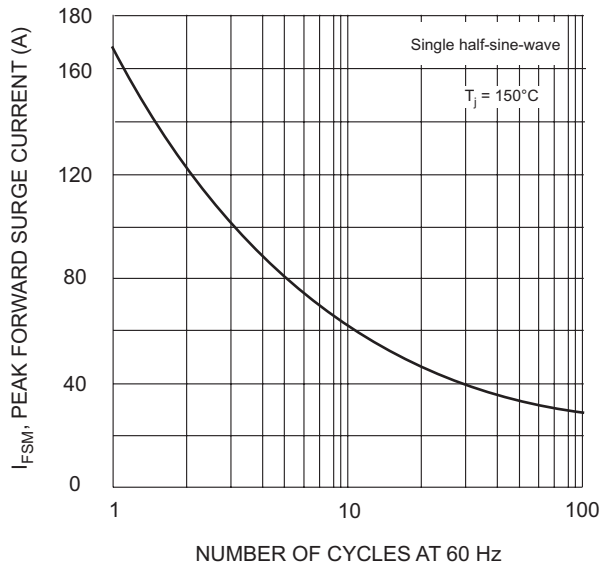
- Notes:
1. Non-repetitive, for t > 1ms and < 8.3 ms.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
 3. Thermal resistance from junction to case per element. Unit mounted on 75 x 75 x 1.6mm aluminum plate heat sink.
 4. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.



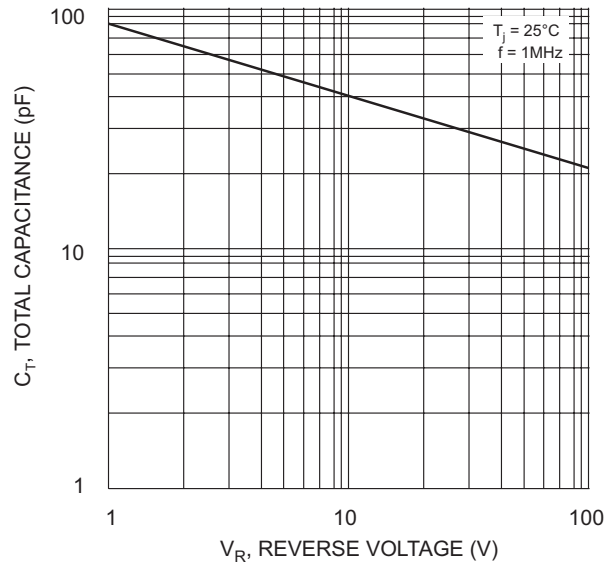
T_C , CASE TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



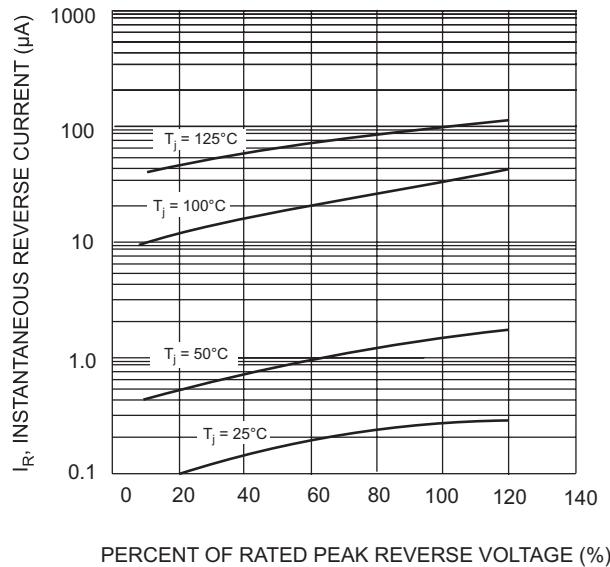
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Maximum Non-Repetitive Surge Current



V_R , REVERSE VOLTAGE (V)
Fig. 4 Typical Total Capacitance, Per Element



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 5 Typical Reverse Characteristics

Ordering Information (Note 5)

| Device | Packaging | Shipping |
|---------------|------------------|-----------------|
| GBJ6005-F | GBJ | 15/Tube |
| GBJ601-F | GBJ | 15/Tube |
| GBJ602-F | GBJ | 15/Tube |
| GBJ604-F | GBJ | 15/Tube |
| GBJ606-F | GBJ | 15/Tube |
| GBJ608-F | GBJ | 15/Tube |
| GBJ610-F | GBJ | 15/Tube |

Notes: 5. For packaging details, visit our website at <http://www.diodes.com/datasheets/ap02008.pdf>

IMPORTANT NOTICE

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. Diodes Incorporated does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

Diodes Incorporated products are not authorized for use as critical components in life support devices or systems without the expressed written approval of the President of Diodes Incorporated.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.