BORN SEMICONDUCTOR

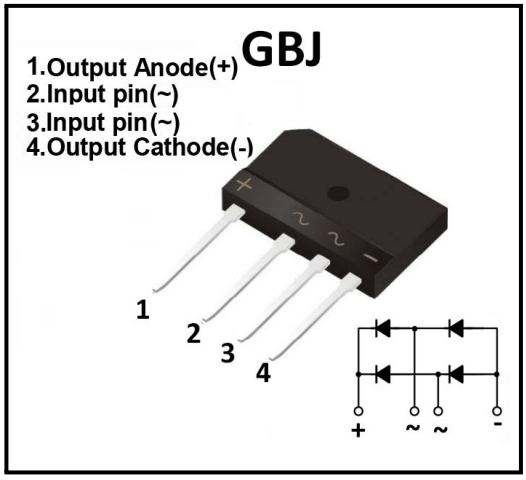
# GBJ35005 - GBJ3510/G

**Single Phase 35Amp Glass passivated Bridge Rectifiers**

## Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0
- The G suffix is uses for photoresist chip, otherwise it is a knife scraping chip

## Mechanical Data




## MECHANICAL DATA

- Case: Molded plastic, GBJ
- Terminals: Plated Leads Solderable perMIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version

## Maximum Ratings And Electrical Characteristics (@$T_A$=25°C unless otherwise noted)

| Symbol | Parameter | GBJ 35005 | GBJ 3501 | GBJ 3502 | GBJ 3504 | GBJ 3506 | GBJ 3508 | GBJ 3510 | Unit |
|---|---|---|---|---|---|---|---|---|---|
| $V_{RRM}$ | repetitive peak reverse voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| $V_{RWM}$ | Working Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | |
| $V_{RMS}$ | RMS voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | |
| $V_{DC}$ | DC blocking voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | |
| $IF_{AV}$ | Average Rectified Output Current (Note 1)@$T_C$=90°C | 35.0 | | | | | | | A |
| $I_{FSM}$ | Peak forward surge current, 8.3ms single half sine-wave | 370 | | | | | | | A |
| $I_t^2$ | $I_t^2$ Rating for fusing (t<8.3ms) | 568.135 | | | | | | | $A_S^2$ |
| $V_{FM}$ | Forward Voltage element @IF=17.5A | 1.05 | | | | | | | V |
| $I_R$ | Peak Reverse Current@$T_A$=25°C<br>at rated DC blocking voltage@ $T_A$=125°C | 5.0<br>500 | | | | | | | uA |
| $C_J$ | Typical junction capacitance | 75 | | | | | | | pF |
| $R_{\theta JA}$ | Between junction and ambient, Without heatsink | 22 | | | | | | | °C/W |
| $R_{\theta JC}$ | Between junction and case, With heatsink | 0.8 | | | | | | | |
| $T_J$ | Operation Temperature Range | -55 to +150 | | | | | | | °C |
| $T_{STG}$ | Storage Temperature Range | -55 to +150 | | | | | | | |

Note:(1)Thermal resistance from junction to case per element. Unit mounted on 75x75x1.6mm aluminum plate heat sink.



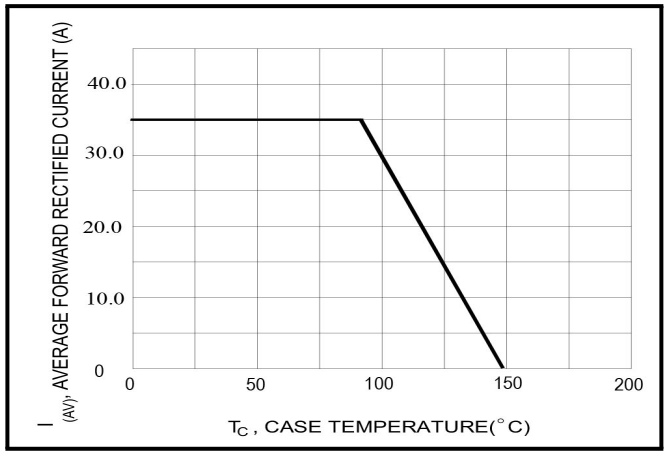
**Revision: 2022-Jan-1**

# GBJ35005 - GBJ3510/G

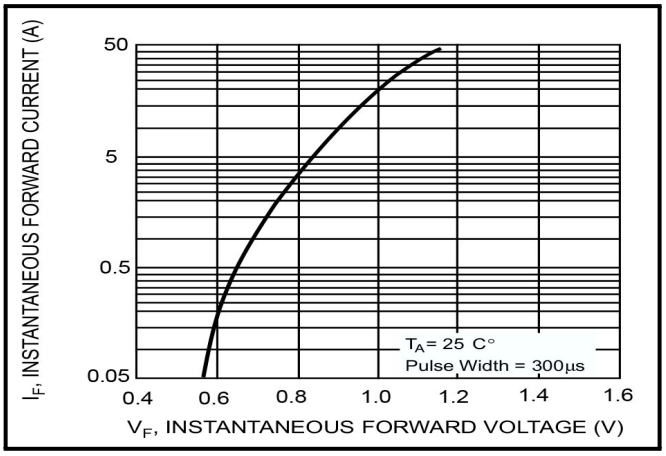
**Single Phase 35Amp Glass passivated Bridge Rectifiers**

## Ratings And Characteristic Curves

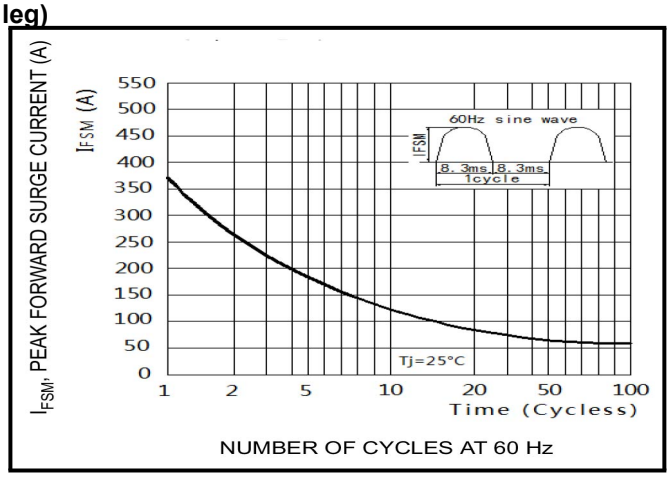
### Figure 1: Output Current Derating Curve



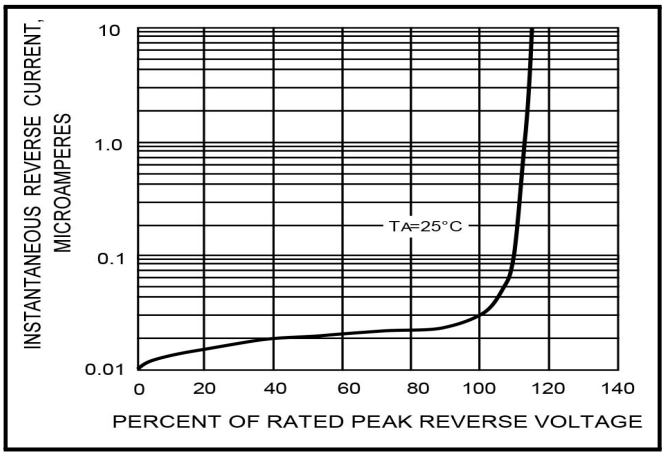

### Figure 2: Typical Forward Characteristics (per leg)



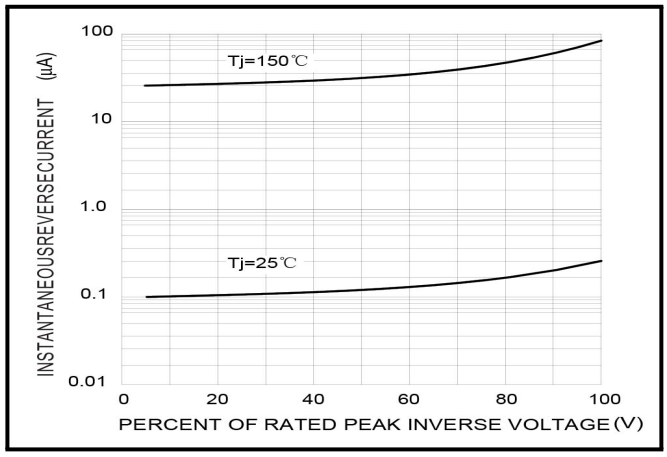

### Figure 3:Maximum Peak Forward Surge Current (per leg)




### Figure 4:Typical Junction Capacitance




### Figure 5:TYPICAL REVERSE CHARACTERISTICS



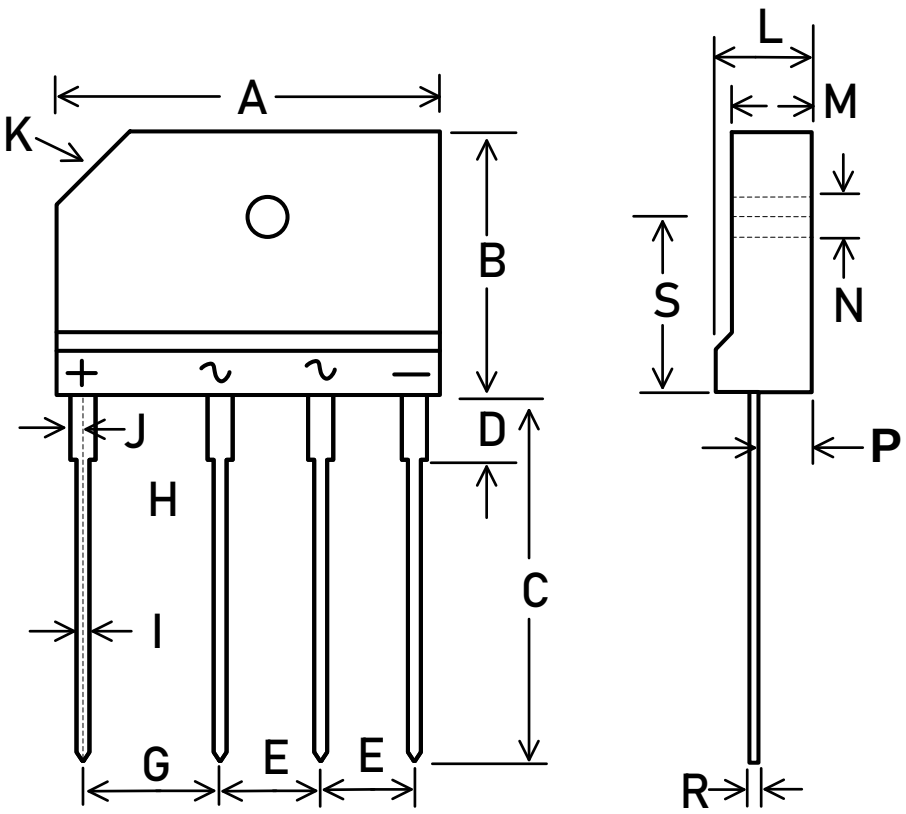



**Revision: 2022-Jan-1**

# GBJ35005 - GBJ3510/G

**Single Phase 35Amp Glass passivated Bridge Rectifiers**

## Outline Drawing –GBJ




| SYMBOL | MILLIMETER | |
|---|---|---|
| | MIN. | MAX. |
| A | 29.70 | 30.3 |
| B | 19.70 | 20.3 |
| 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 | 3.0x45° | |
| 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 |

# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

***Click to view similar products for*** Bridge Rectifiers ***category:***

***Click to view products by*** Bourne ***manufacturer:***

Other Similar products are found below :

MB2510 MB252 MB356G MB358G GBJ1504-BP GBU10B-BP GBU15K-BP GBU4A-BP GBU4D-BP GBU6B-E3/45 DB101-BP DF01 DF10SA-E345 BU1508-E3/45 BU1510-E3/45 KBPC50-10S RS405GL-BP GBJ1502-BP GBU6M GSIB1520-E3/45 36MB140A TB102M MB1510 MB86 TL401G MDA920A2 TU602 TU810 MP5010W-BP MP501W-BP MP502-BP BR84DTP204 BU1508-E3/51 KBPC25-02 VS-110MT120KPBF VS-2KBB60 VS-60MT120KPBF VS-60MT80KPBF DB105-BP DF1510S VS-40MT160PAPBF VISKBU8K-E4/51 36MT100 GBU4G-BP GBU6B-E3/51 DF15005S-E3/77 GSIB15A80-E3/45 DB104-BP D3SB60 TB354