

4A Glass Passivated Bridge Rectifier

Features

- Glass passivated chip junction
- High case dielectric strength
- High surge current capability
- Ideal for printed circuit boards
- High temperature soldering guaranteed: 260°C/10 seconds
0.375" (9.5mm) lead length at 5lbs.(2.3kg) tension
- This series is UL recognized under component index, File number E194718
- RoHS compliant



GBL



Mechanical Data

| | |
|-------------------|----------------------------------------------------------|
| Case: | GBL molded plastic body |
| Epoxy: | Plastic package has UL flammability classification 94V-0 |
| Terminals: | Plated leads solderable per MIL-STD-750, Method 2026 |
| Polarity: | As marked on case |
| Weight: | 0.071 ounce, 2.0 gram |

Maximum Ratings And Electrical Characteristics (T_{amb}=25°C)

| Symbols | Parameter | GBL005 | GBL01 | GBL02 | GBL04 | GBL06 | GBL08 | GBL10 | Unit | Conditions |
|--------------------------|-------------------------------------------|--------|-------|-------|-------|-------|-------|-------|------------------|------------------------------------------------------------------|
| V_{RRM} | Maximum Repetitive Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| V_{RMS} | Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| V_{DC} | Maximum DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| I_{F(AV)} | Maximum Average Forward Rectified Current | 4.0 | | | | | | | A | Tc=50° C Note 1 |
| I_{FSM} | Peak Forward Surge Current | 150 | | | | | | | A | 8.3ms Single Sine-wave Superimposed on Rated Load (JEDEC Method) |
| I²t | Rating for Fusing (t<8.3ms) | 93 | | | | | | | A ² S | |

4A Glass Passivated Bridge Rectifier

GBL005 - GBL10

| Symbols | Parameter | GBL005 | GBL01 | GBL02 | GBL04 | GBL06 | GBL08 | GBL10 | Unit | Conditions |
|---------------------------------------|-----------------------------------------------------------------|-------------|-------|-------|-------|-------|-------|-------|------|----------------------------|
| V_F | Maximum Instantaneous Forward Voltage Drop per leg | 1.0 | | | | | | | V | I _F =4.0A |
| I_R | Maximum DC Reverse Current at Rated DC Blocking Voltage per leg | 5.0 | | | | | | | μA | TA=25°C |
| | | 500 | | | | | | | | TA=125°C |
| C_J | Typical Junction Capacitance per leg | 95 | | | | 40 | | | pF | V _R =4V, f=1MHz |
| R_{θJA} | Typical Thermal Resistance per leg | 22 | | | | | | | °C/W | Note 1 |
| R_{θJC} | | 3.5 | | | | | | | | Note 2 |
| T_J, T_{STG} | Operating Junction and Storage Temperature Range | -55 to +150 | | | | | | | °C | |

- Note:** 1. Unit mounted on 3.0 x 3.0 x 0.11" thick (7.5 x 7.5 x 0.3cm) aluminum plate.
 2. Unit mounted on P.C.B. at 0.375" (9.5mm) lead length and 0.5 x 0.5" (12 x 12mm) copper pads.

Rating and Characteristic Curves

Fig.1- Derating Curve Output Rectified Current

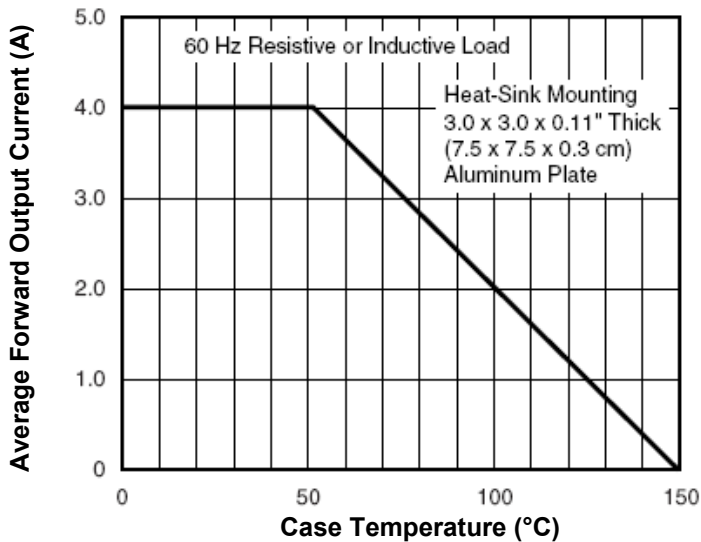
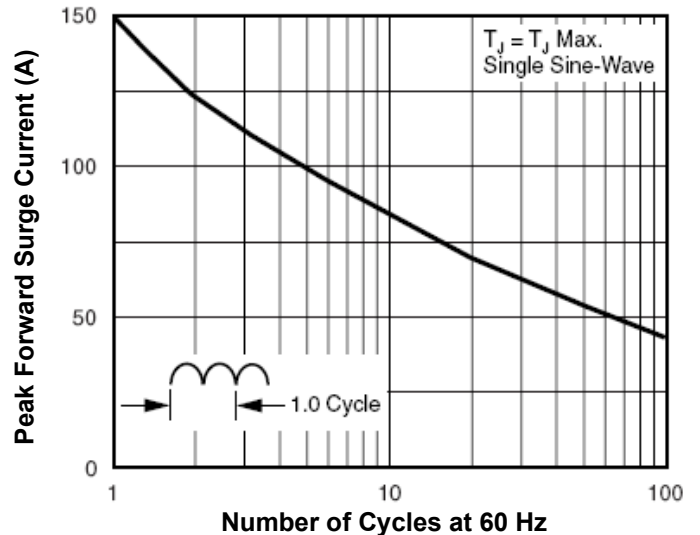


Fig.2-Maximum Non-Repetitive Peak Forward Surge Current per leg



4A Glass Passivated Bridge Rectifier

GBL005 - GBL10

Fig.3-Typical Forward Characteristics per leg

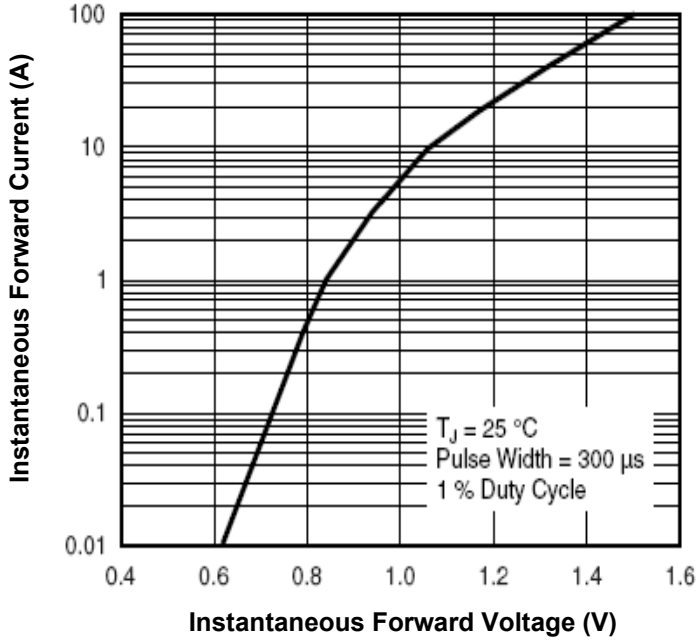


Fig.4-Typical Reverse Leakage Characteristics per leg

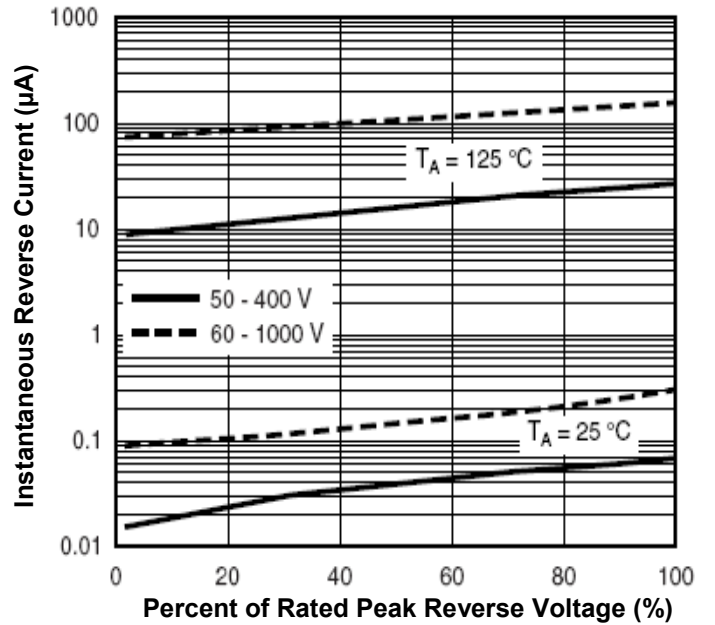
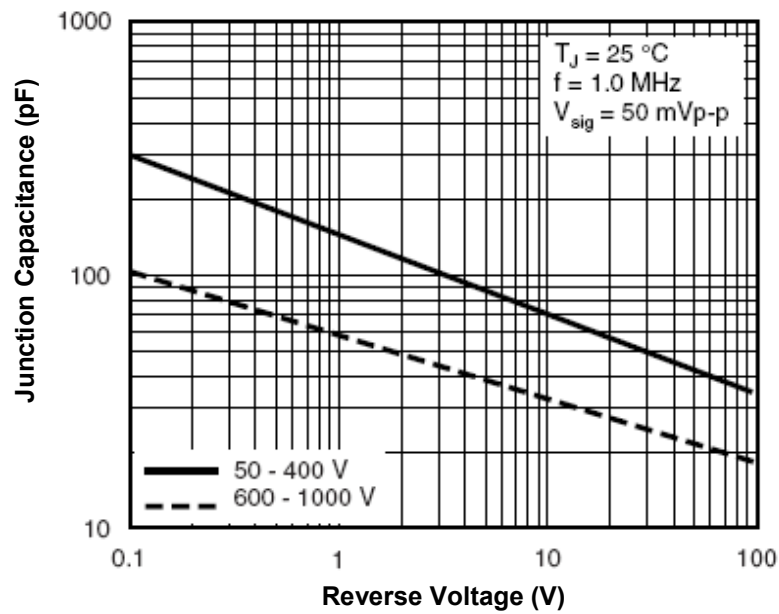


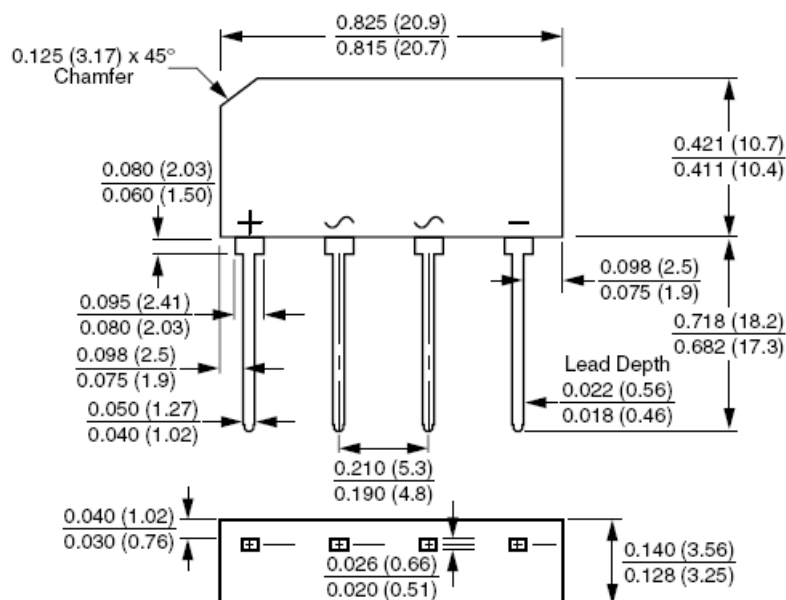
Fig.5-Typical Junction Capacitance per leg



4A Glass Passivated Bridge Rectifier

GBL005 - GBL10

Dimensions in inch (mm)



How to contact us

Case Type GBL

US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 824-8766 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: taitron@taitroncomponents.com

Http://www.taitroncomponents.com

TAITRON COMPONENTS MEXICO, S.A. DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.

42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

TAITRON COMPONENTS INCORPORATED REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931