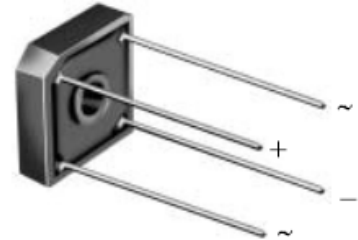


3.0A Glass Passivated Bridge Rectifier

Features

- Glass passivated chip junction
- High case dielectric strength 1500 VRMS
- Typical IR less than 0.1µA
- 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



GBPC1



Mechanical Data

| | |
|-------------------------|--|
| Case: | GBPC1, Molded plastic body over passivated junctions |
| Epoxy: | Plastic package has UL flammability classification 94V-0 |
| Terminals: | Plated leads solderable per MIL-STD-750, Method 2026 |
| Polarity: | As marked on case |
| Mounting Torque: | 8.8 in. – lbs. max. |
| Weight: | 0.1 ounce, 2.8 grams |

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

| Symbols | Parameter | GBPC 1005 | GBPC 101 | GBPC 102 | GBPC 104 | GBPC 106 | GBPC 108 | GBPC 110 | Unit | Conditions |
|---------------|---|-----------|----------|----------|----------|----------|----------|----------|------|--|
| VRRM | Maximum Repetitive Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| VRMS | Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| VDC | Maximum DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| IF(AV) | Maximum Average Forward Rectified Current | 3.0 | | | | | | | A | Tc=60° C Note 1 |
| IFSM | Peak Forward Surge Current | 60 | | | | | | | A | 8.3ms Single Sine-wave Superimposed on Rated Load (JEDEC Method) |

3.0A Glass Passivated Bridge Rectifier

GBPC1005 - GBPC110

| Symbols | Parameter | GBPC 1005 | GBPC 101 | GBPC 102 | GBPC 104 | GBPC 106 | GBPC 108 | GBPC 110 | Unit | Conditions |
|-----------------|---|-------------|----------|----------|----------|----------|----------|----------|------------------------|---------------------------------------|
| I^2t | Rating for Fusing ($t < 8.3\text{ms}$) | 15 | | | | | | | A^2sec | |
| V_F | Maximum Instantaneous Forward Voltage Drop per leg | 1.0 | | | | | | | V | $I_F = 1.5\text{A}$ |
| I_R | Maximum DC Reverse Current at Rated DC Blocking Voltage per leg | 5.0 | | | | | | | μA | $T_A = 25^\circ\text{C}$ |
| | | 500 | | | | | | | | $T_A = 125^\circ\text{C}$ |
| C_J | Typical Junction Capacitance per leg | 21 | | | | | | | pF | $V_R = 4\text{V}$, $f = 1\text{MHz}$ |
| $R_{\theta JA}$ | Typical Thermal Resistance per leg | 12 | | | | | | | $^\circ\text{C/W}$ | Note 2 |
| $R_{\theta JC}$ | | 8.0 | | | | | | | | |
| T_J, T_{STG} | Operating Junction and Storage Temperature Range | -55 to +150 | | | | | | | $^\circ\text{C}$ | |

- Note:**
- Unit mounted on 4.0 x 4.0 x 0.11" thick (10.5 x 10.5 x 0.3cm) aluminum plate.
 - Bolt down on heat sink with silicon thermal compound between bridge and mounting surface for maximum heat transfer with #6 screw.

Rating and Characteristic Curves

Fig.1- Derating Curve Output Rectified Current

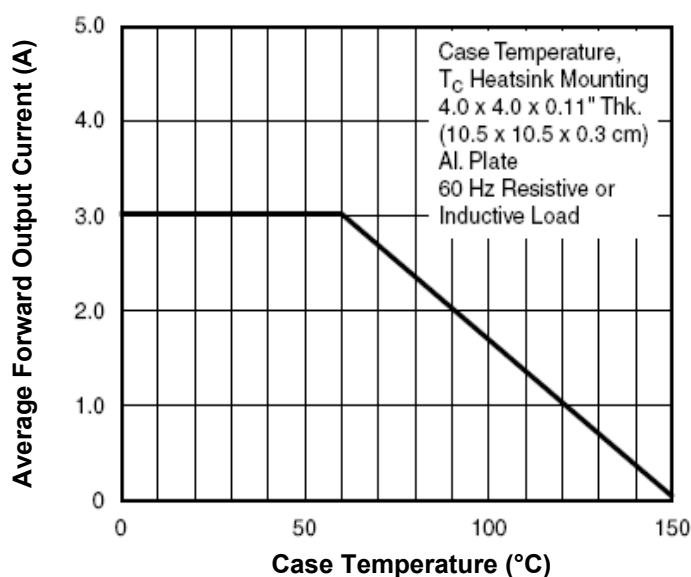
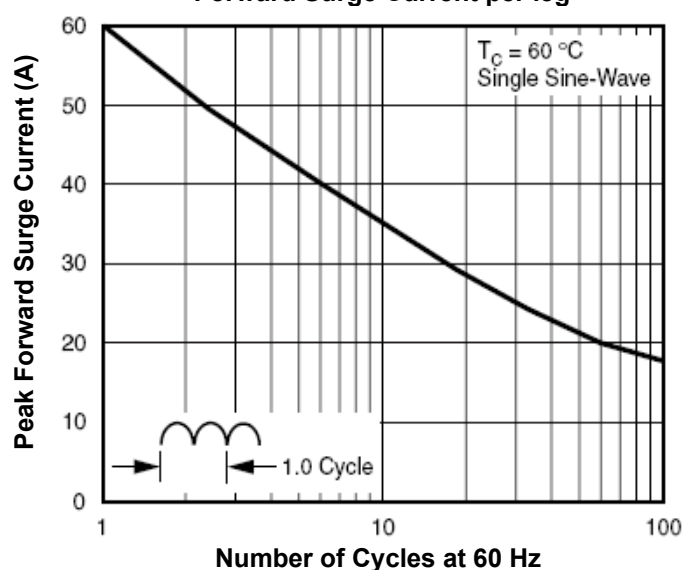


Fig.2-Maximum Non-Repetitive Peak Forward Surge Current per leg



3.0A Glass Passivated Bridge Rectifier

GBPC1005 - GBPC110

Fig.3-Typical Forward Characteristics per leg

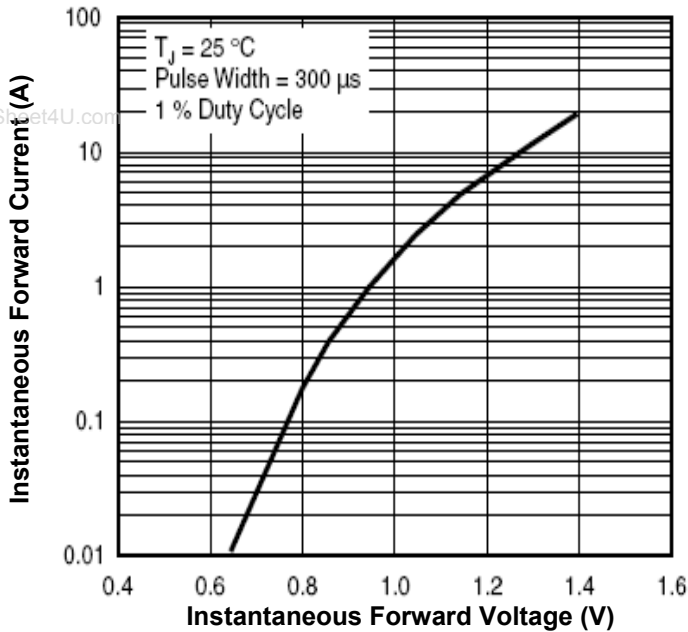


Fig.4-Typical Reverse Leakage Characteristics per leg

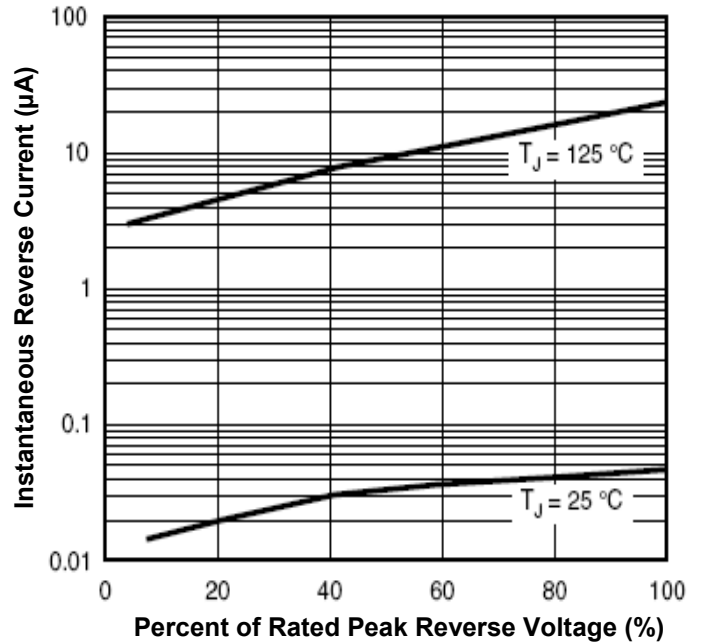
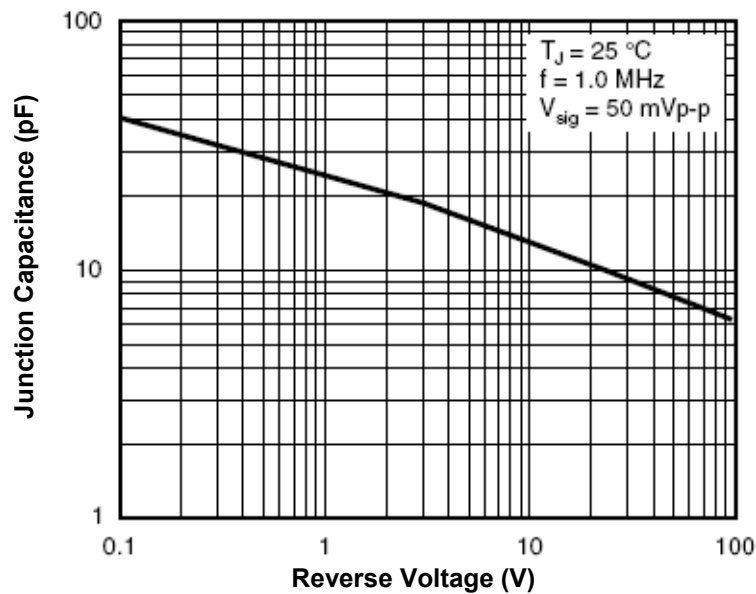


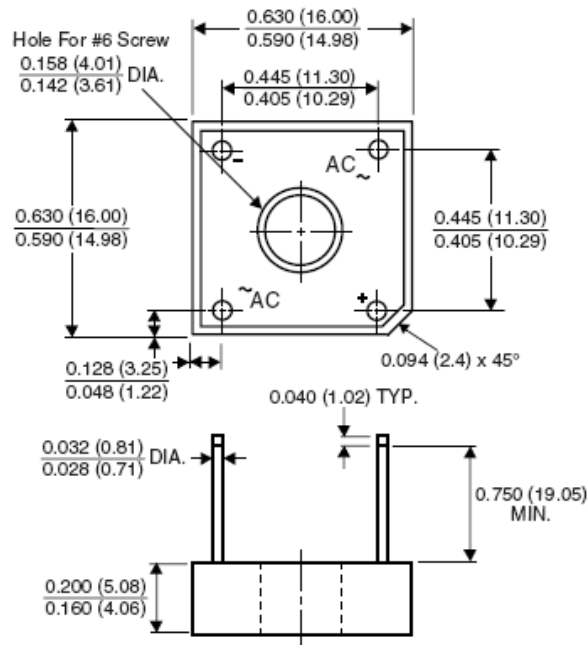
Fig.5-Typical Junction Capacitance per leg



3.0A Glass Passivated Bridge Rectifier

GBPC1005 - GBPC1110

Dimensions in inch (mm)



Case Style GBPC1

How to contact us

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

TAITRON
components incorporated

Rev. A/AH 2008-05-23