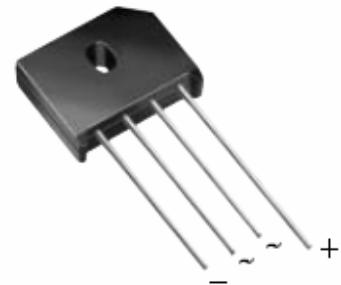


## 6A Glass Passivated Bridge Rectifier

### Features

- Glass passivated chip junction
- Low forward voltage drop
- High reliability
- Ideal for printed circuit boards
- High temperature soldering guaranteed: 250° C/10 seconds at 5lbs.(2.3kg) tension
- RoHS compliant



TU



### Mechanical Data

|                         |   |
|-------------------------|---|
| <b>Case:</b>            | TU, Epoxy meets UL 94V-0 flammability rating        |
| <b>Terminals:</b>       | Plated leads solderable per MIL-STD-202, Method 208 |
| <b>Polarity:</b>        | Polarity symbols marked on case                     |
| <b>Mounting Torque:</b> | 8.8 in. – lbs. max.                                 |
| <b>Weight:</b>          | 8.0 grams (approx)                                  |

### Maximum Ratings And Electrical Characteristics (T<sub>amb</sub>=25°C)

| Symbols                  | Parameter   | TU 600G | TU 601G | TU 602G | TU 604G | TU 606G | TU 608G | TU 610G | Unit | Conditions  |
|--------------------------|---|---------|---------|---------|---------|---------|---------|---------|------|---|
| <b>V<sub>RRM</sub></b>   | Maximum Repetitive Peak Reverse Voltage                         | 50      | 100     | 200     | 400     | 600     | 800     | 1000    | V    |   |
| <b>V<sub>RMS</sub></b>   | Maximum RMS Voltage   | 35      | 70      | 140     | 280     | 420     | 560     | 700     | V    |   |
| <b>V<sub>DC</sub></b>    | Maximum DC Blocking Voltage                                     | 50      | 100     | 200     | 400     | 600     | 800     | 1000    | V    |   |
| <b>I<sub>F(AV)</sub></b> | Maximum Average Forward Rectified Current (Note 1)              | 6.0     |         |         |         |         |         |         | A    | T <sub>A</sub> =100°C   |
| <b>I<sub>FSM</sub></b>   | Peak Forward Surge Current                                      | 250     |         |         |         |         |         |         | A    | 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) |
| <b>V<sub>F</sub></b>     | Maximum Instantaneous Forward Voltage Drop per leg              | 1.0     |         |         |         |         |         |         | V    | I <sub>F</sub> =6.0A  |
| <b>I<sub>R</sub></b>     | Maximum DC Reverse Current at Rated DC Blocking Voltage per leg | 5.0     |         |         |         |         |         |         | μA   | T <sub>A</sub> =25°C  |
|                          |   | 500     |         |         |         |         |         |         |      | T <sub>A</sub> =125°C   |

# 6A Glass Passivated Bridge Rectifier

## TU600G - TU610G

| Symbols         | Parameter                                  | TU 600G    | TU 601G | TU 602G | TU 604G | TU 606G | TU 608G | TU 610G | Unit             | Conditions |
|-----------------|--|------------|---------|---------|---------|---------|---------|---------|------------------|------------|
| $I^2t$          | Rating for Fusing<br>(1ms<t<8.3ms)         | 259        |         |         |         |         |         |         | A <sup>2</sup> S |            |
| $R_{\theta JA}$ | Typical Thermal Resistance<br>per leg      | 8.6        |         |         |         |         |         |         | °C/W             | (Note 2)   |
| $R_{\theta JC}$ | Typical Thermal Resistance<br>per leg      | 3.1        |         |         |         |         |         |         | °C/W             | (Note 1)   |
| $T_J, T_{STG}$  | Operating and Storage<br>Temperature Range | -55 to 150 |         |         |         |         |         |         | °C               |            |

### Note:

1. Mounted on 65 x 35 x 1.5mm Al. plate
2. Mounted on PCB at 9.5mm lead length with 12mm<sup>2</sup> copper pad
3. Single Phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

### Rating and Characteristic Curves

Fig.1- Forward Current Derating Curve

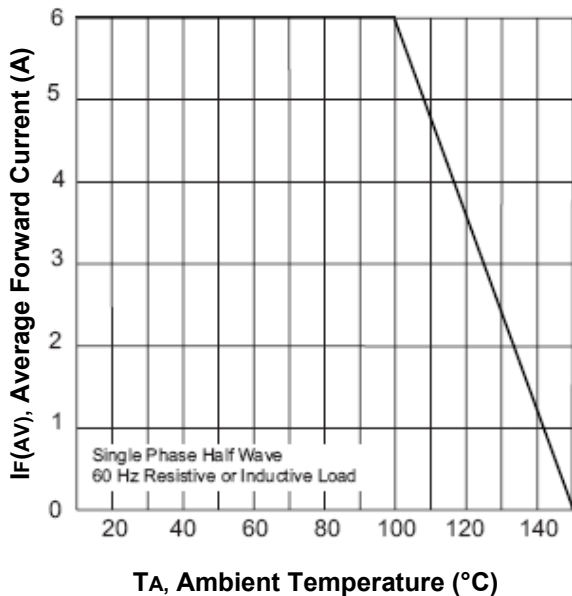
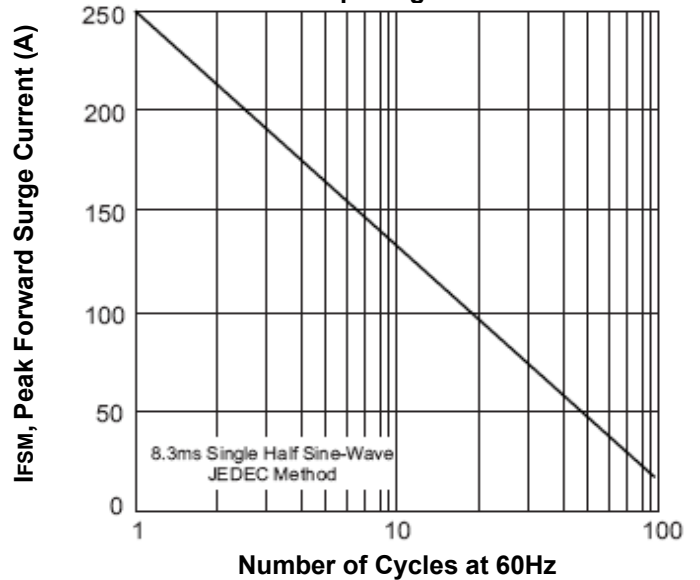


Fig.2-Max Non-Repetitive Peak Forward Surge Current per leg



# 6A Glass Passivated Bridge Rectifier

## TU600G - TU610G

Fig.3- Typical Forward Characteristics, per leg

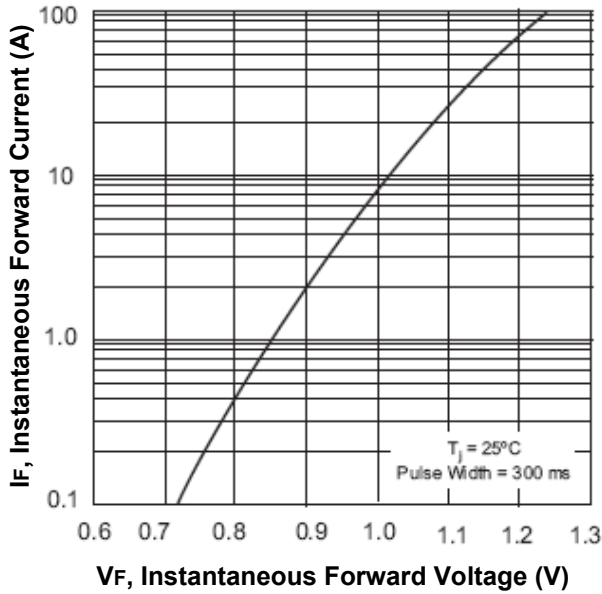


Fig.4-Typical Reverse Characteristics per leg

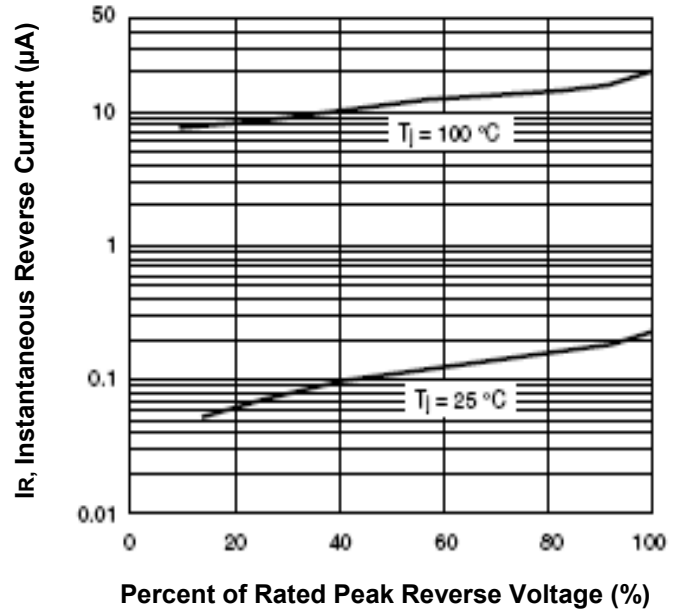
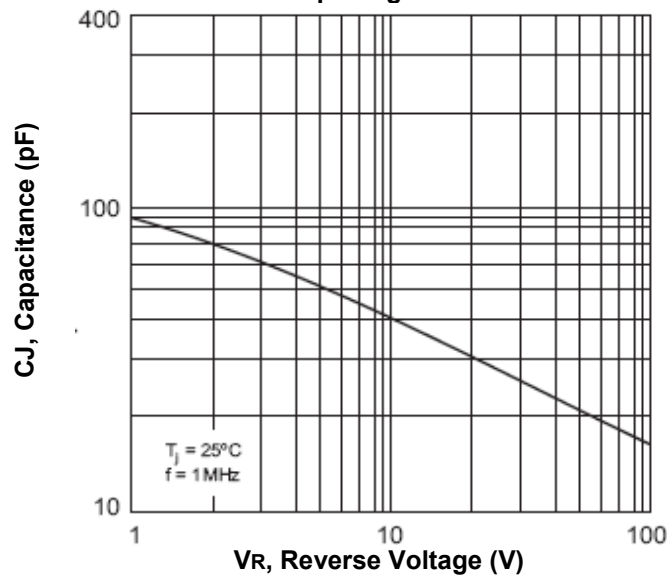


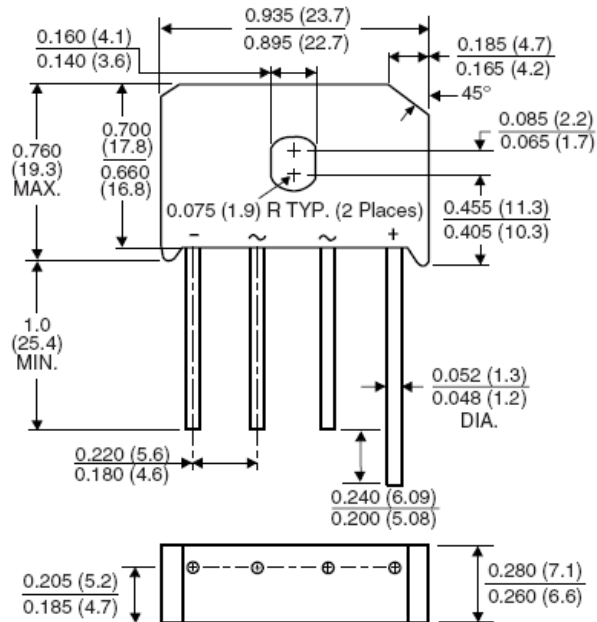
Fig.5-Typical Junction Capacitance, per leg



# 6A Glass Passivated Bridge Rectifier

## TU600G - TU610G

### Dimensions in inch (mm)



TU

### 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](mailto:taitron@taitroncomponents.com)

Http://[www.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