



GBU10005 thru GBU1010

**10.0 A Single-Phase
Silicon Bridge Rectifier
Rectifier Reverse
Voltage 50 to 1000V**

Features

- Ideal for P.C. Board mounting
- High surge current capability
- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 265 °C /10 seconds at 5 lbs (2.3kg) tension

Mechanical Data

Case: Molded plastic body

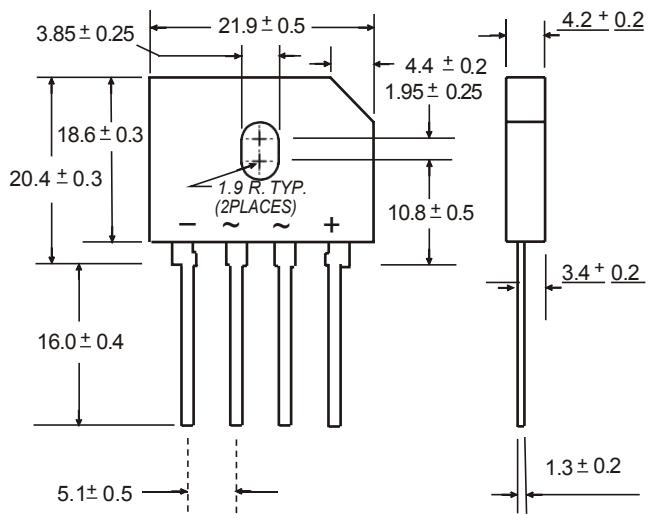
Terminals: Plated leads solderable per MIL-STD-202,
Method 208

Polarity: Polarity symbols molded on body

Mounting Position:: Any

Mounting Torque: 5 in-lbs max.

Weight: 3.8 grams (approx)



Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

Parameter	Symbol	GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=100°C	IF(AV)				10				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM				220				A
Rating for fusing (t<8.3ms)	I ² t				200				A ² sec
Typical thermal resistance per element (1)	ReJA				2.2				°C / W
Operating junction and storage temperature range	TJ, TSTG				-55 to + 150				°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

Parameter	Symbol	GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	Unit
Maximum instantaneous forward voltage drop per leg at 10.0A	VF				1.05				V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR				5.0				A

Notes: (1)Thermal resistance from Junction to Ambemt on P.C.board mounting.



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Fig. 1 Derating Curve for Output Rectified Current

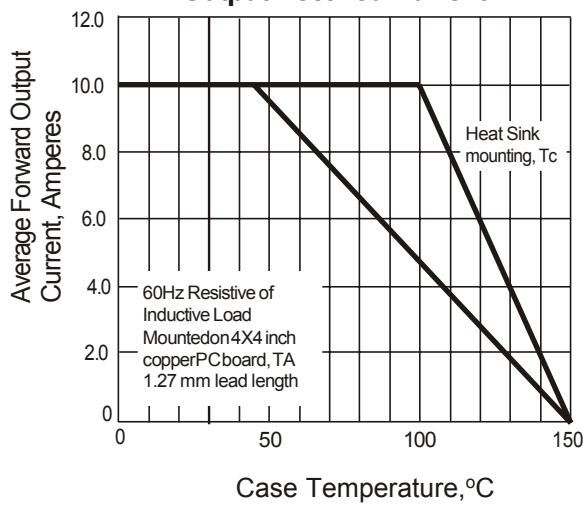


Fig. 3 Typical Instantaneous Forward Characteristics

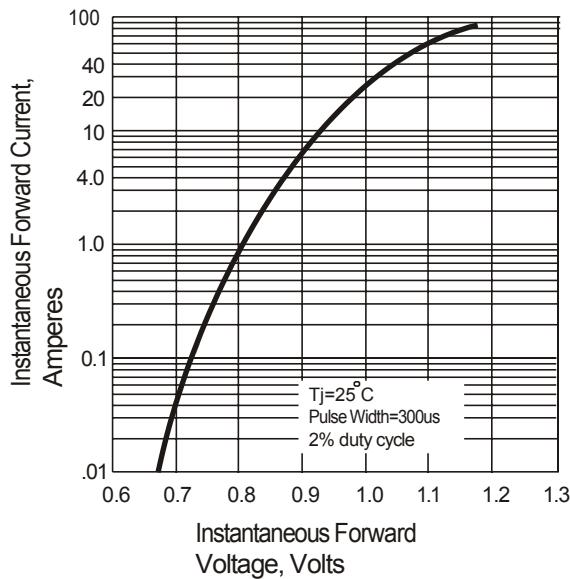


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

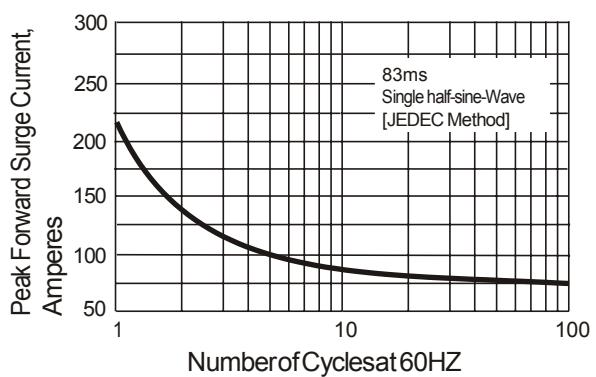


Fig. 4 Typical Reverse Characteristics

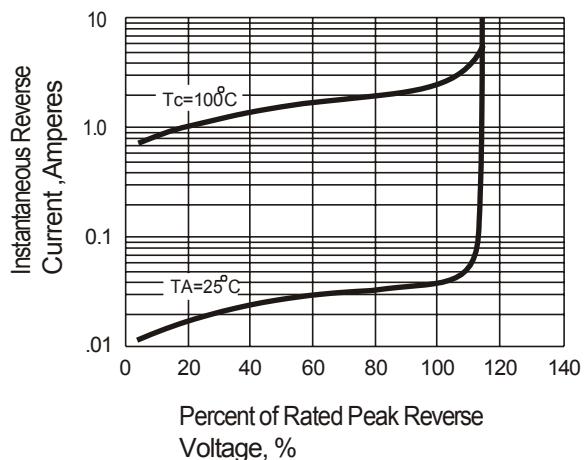
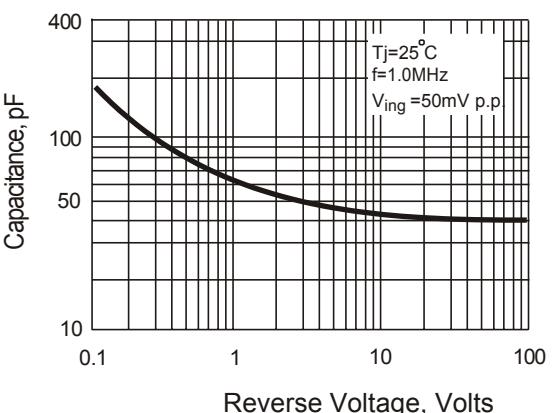


Fig. 5 Typical Junction Capacitance



**注意事项**

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2. 购买时请认清公司商标，如有疑问请与公司本部联系。
3. 在电路设计时请不要超过器件的绝对最大额定值，否则会影响整机的可靠性。
4. 本说明书如有版本变更不另外告知

NOTE

1. Shenzhen Huatianwei Electronics co., Ltd sales its product either through direct sales or sales agent , thus, for customers, when ordering , please check with our company.
2. We strongly recommend customers check carefully on the trademark when buying our product, if there is any question, please don't be hesitate to contact us.
3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
4. Shenzhen Huatianwei Electronics co., Ltd reserves the right to make changes in this specification sheet and is subject to change without prior notice.

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