



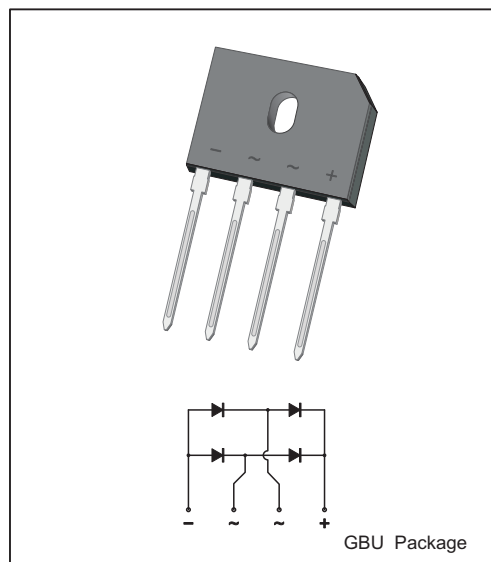
### 6A Plug-in High Efficiency Recovery Rectifier Bridge

#### FEATURES:

- Glass Passivated Chip
- Reverse Voltage - 400 to 600 V
- Forward Current - 6 A
- High Surge Forward Current Capability
- Component in accordance to ROHS 2002/95/EC

#### MECHANICAL DATA

- Package: GBU
- Epoxy meets UL 94V-0 flammability rating
- Polarity: As marked on body
- Approx Weight: 3.8g ( 0.134oz)



#### Maximum Ratings and Electrical characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	GBUU604	GBUU606	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	400	600	V
Maximum RMS voltage	$V_{RMS}$	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	400	600	V
Average Rectified Output Current	$I_O$	6		A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	175		A
$I^2t$ Rating for Fusing	$I^2t$	127		A <sup>2</sup> S
Maximum Forward Voltage at 3.0 A	$V_F$	0.95	1.45	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	$I_R$	10 500		$\mu\text{A}$
Typical Junction Capacitance (f=1MHz,VR=4V)	$C_j$	115	90	pF
Typical Thermal Resistance (Note1)	$R_{\theta JA}$ $R_{\theta JC}$	20 2.5		$^\circ\text{C/W}$
Maximum Reverse Recovery Time (Note2)	$t_{rr}$	50		nS
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150		$^\circ\text{C}$

Note: 1. Device mounted on 32mmX30mmX15mm AL Block heat sink.

Note: 2. Measured with  $I_F = 0.5\text{ A}$ ,  $I_R = 1\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$ .



Typical characteristic curve

Fig.1 Average Rectified Output Current Derating Curve

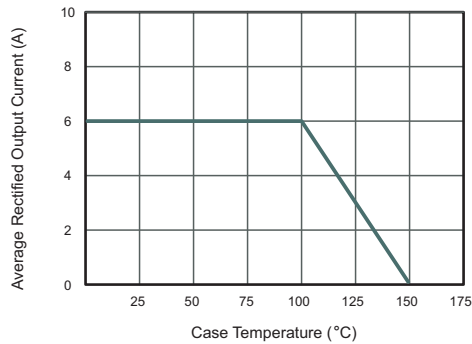


Fig.2 Typical Reverse Characteristics

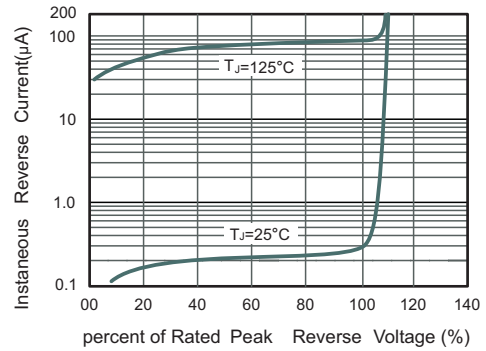


Fig.3 Typical Forward Characteristics

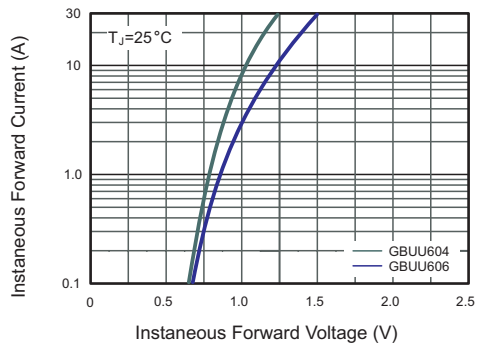


Fig.4 Typical Junction Capacitance

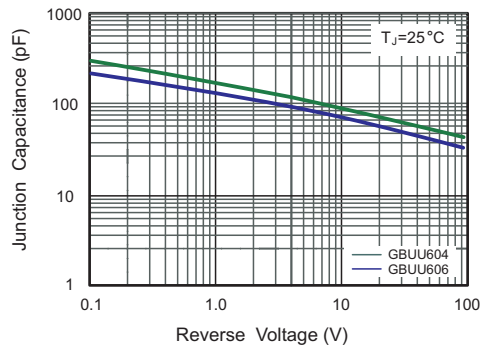
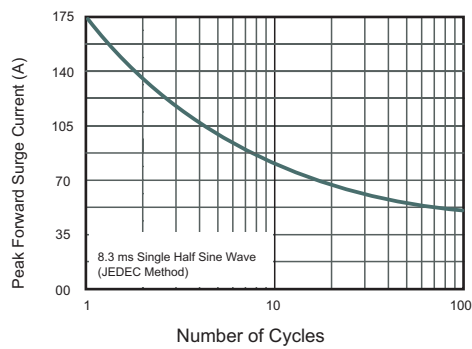


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

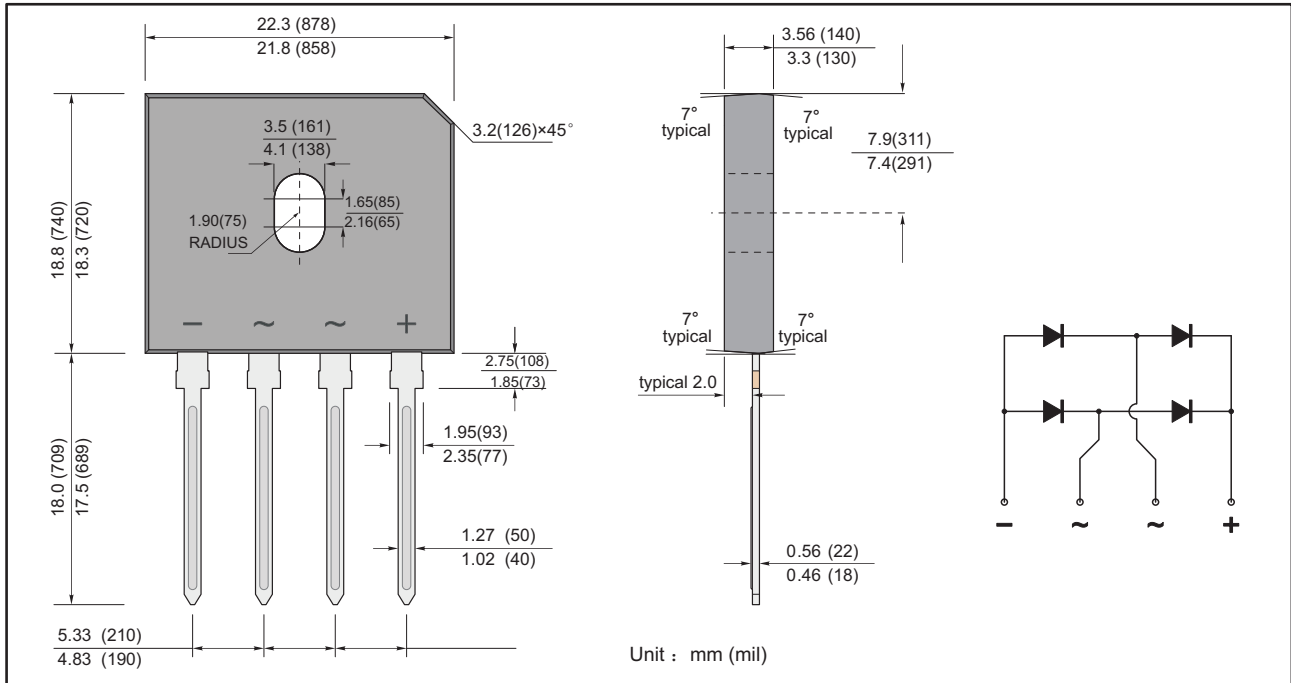




PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

GBU Package







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