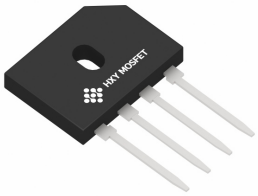
GBU4005-GBU410
Plastic-Encapsulate Bridge Rectifier

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



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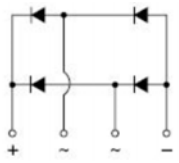
Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
GBU4005-GBU410	GBU	GBU4xx	500

xx: From 005-10



Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	GBU 4005	GBU 401	GBU 402	GBU 404	GBU 406	GBU 408	GBU 410	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at T_A=100°C	$I_{F(AV)}$	4.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Rating for fusing (t<8.3ms)	I^2t	93							A^2sec
Typical thermal resistance per element (1)	$R_{\theta JA}$	2.2							°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-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 4005	GBU 401	GBU 402	GBU 404	GBU 406	GBU 408	GBU 410	Unit
Maximum instantaneous forward voltage drop per leg at 4.0A	V_F	1.1							V
Maximum DC reverse current at rated T_A =25°C DC blocking voltage per element T_A =125°C	I_R	5.0 500							μA

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

Rating and Characteristic Curves (TA=25°C Unless otherwise noted)

Fig. 1 Derating Curve for Output Rectified Current

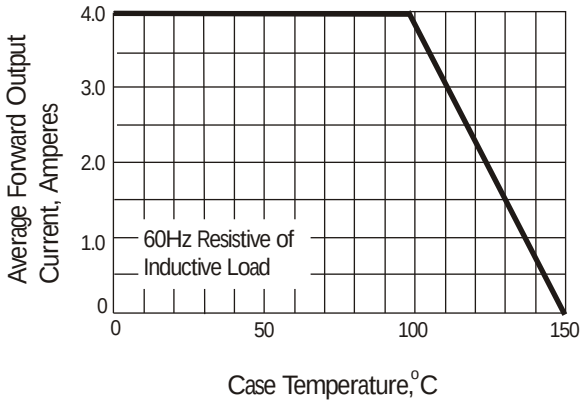


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

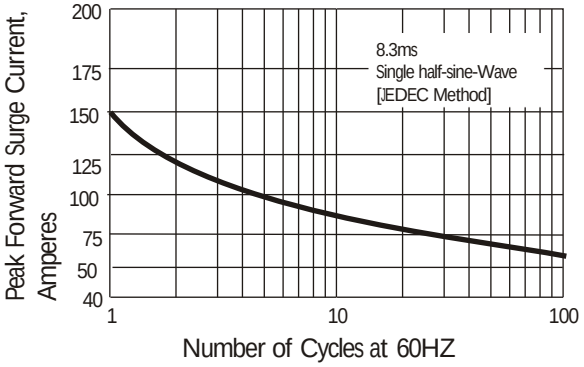


Fig. 3 Typical Instantaneous Forward Characteristics

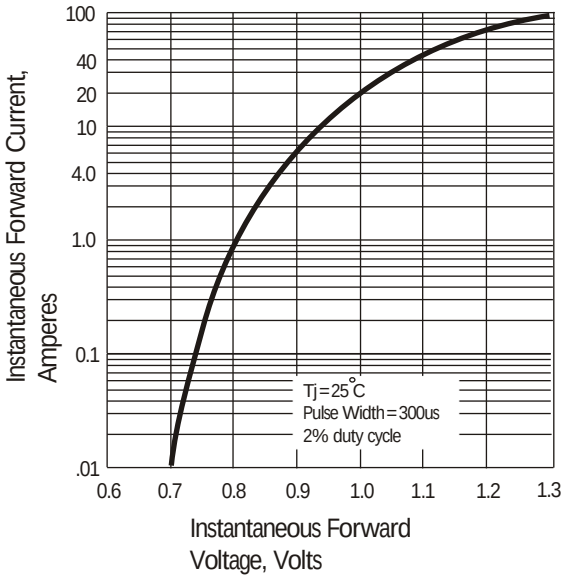


Fig. 4 Typical Revers Characteristics

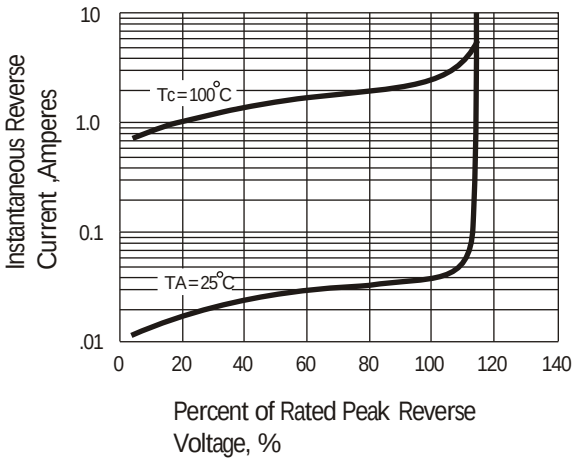
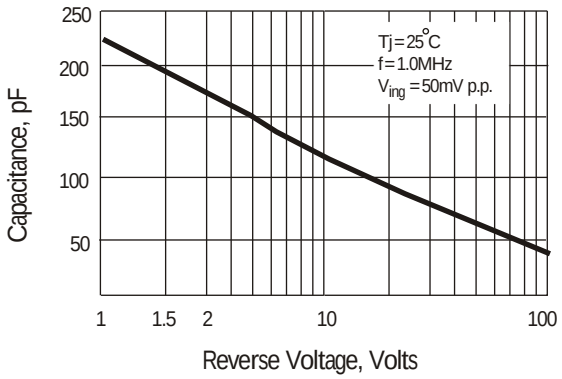


Fig. 5 Typical Junction Capacitance



Package Outline Dimensions

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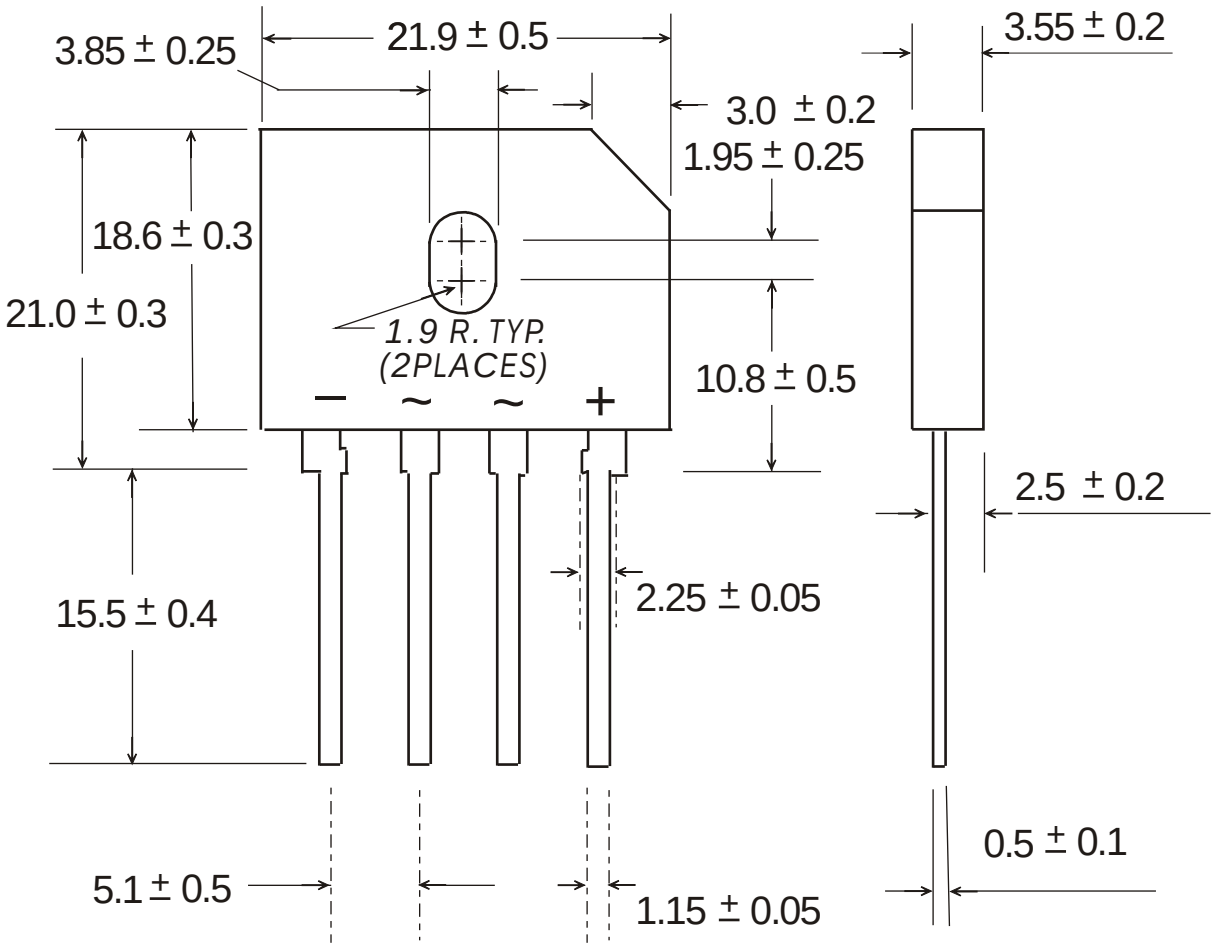

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