

# <u>GBU1506L</u>

#### LOW VF GENERAL PURPOSE BRIDGE RECTIFIER Reverse Voltage:600Volts Forward Current:15.0 Amps

#### FEATURES

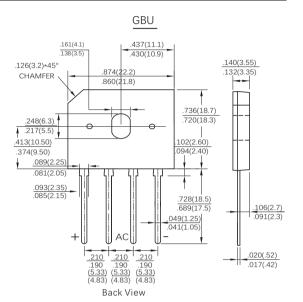
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- · High current capability
- · Low forward voltage drop
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

#### MECHANICAL DATA

- · Case: GBU molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750,method 2026
- Mounting Position: Any

#### TYPICAL APPLICATIONS

Used in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, charger, home appliances, office equipment, and telecommunication applications.



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at  $25^{\circ}$ C ambient temperature unless otherwise specified. Single phase ,half wave , resistive or inductive load. For capacitive load,derate current by 20%.)

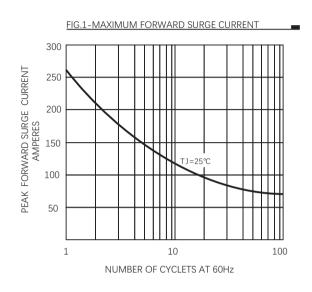
Parameters		Symbol	Value	Units
Maximum Reverse Peak Reverse Voltage		V <sub>RRM</sub>	600	Volts
Maximum RMS Voltage		V <sub>RMS</sub>	420	Volts
Maximum DC Blocking Voltage		V <sub>DC</sub>	600	Volts
Maximum Average Forward Rectified Current, (See Fig 2)		I <sub>F(AV)</sub>	15.0	Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load		I <sub>FSM</sub>	260	Amps
Rating for Fusing (t =8.3ms)		l²t	280	A <sup>2</sup> S
Maximum Instantaneous Forward Voltage at 7.5A DC		V <sub>F</sub>	0.93	Volts
Maximum DC Reverse Current at rated DC blocking voltage	T,=25℃		5	μΑ
	T,=125℃	R	100	μΑ
Typical Junction Capacitance (Note 1)		C,	50	pF
Typical thermal resistance Junction-Ambient Junction-Case		R <sub>eja</sub> R <sub>ejc</sub>	25 1.8	°C/W
Operating temperature range		Τ,	-55 to +150	°C
Storge temperature range		T <sub>stg</sub>	-55 to +150	°C

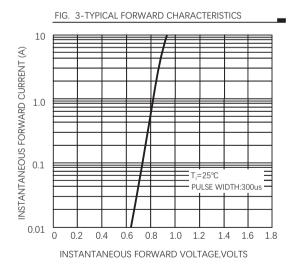
NOTE: 1.Measured at 1MHz and applied reverse voltage of 4.0 Volts.

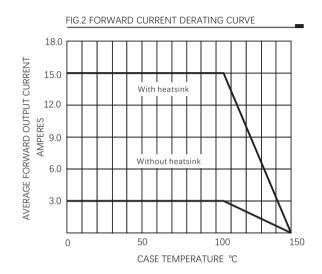
2 Unit mounted on 75mm x 45mm x 5.5mm copper plate heatsink



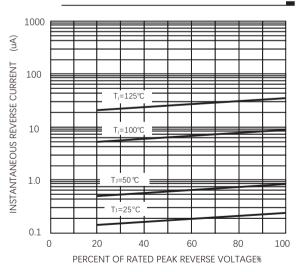
RATINGS AND CHARACTERISTIC CURVES GBU1506L







#### FIG.4 - TYPICAL REVERSE CHARACTERISTICS





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