



# GBU1501 THRU GBU1510

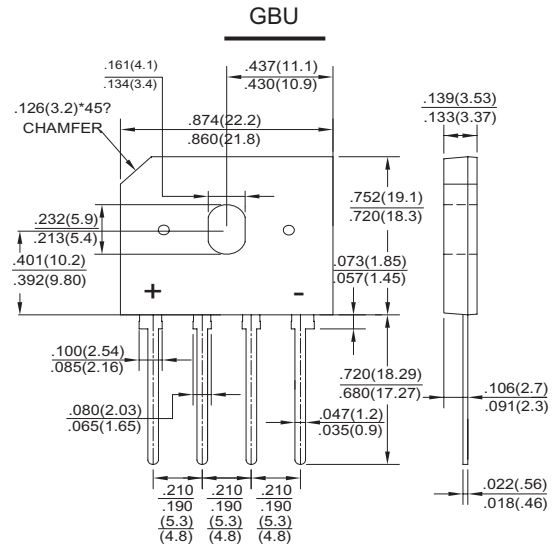
**BRIDGE RECTIFIER**  
 Reverse Voltage: 100 to 1000 Volts  
 Forward Current: 15.0 Amps

## 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 2011/65/EU

## MECHANICAL DATA

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



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

	Symbols	GBU1501	GBU1502	GBU1504	GBU1506	GBU1508	GBU1510	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	$I_{(AV)}$	15.0						Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	240						Amps
Rating for fusing (t<8.3ms)	$I^2t$	239						A <sup>2</sup> s
Maximum Instantaneous Forward Voltage at 7.5 A DC	$V_F$	1.0						Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^\circ\text{C}$	10						$\mu\text{A}$
	$T_A=125^\circ\text{C}$	500						$\mu\text{A}$
Typical Junction Capacitance (Note 1)	$C_J$	70						pF
Typical thermal resistance	$R_{\theta JC}$	2.2						°C/W
Operating temperature range	$T_J$	-55 to +150						°C
Storage temperature range	$T_{STG}$	-55 to +150						°C

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

# RATINGS AND CHARACTERISTIC CURVES GBU1501 THRU GBU1510

FIG.1-MAXIMUM FORWARD SURNGE CURRENT

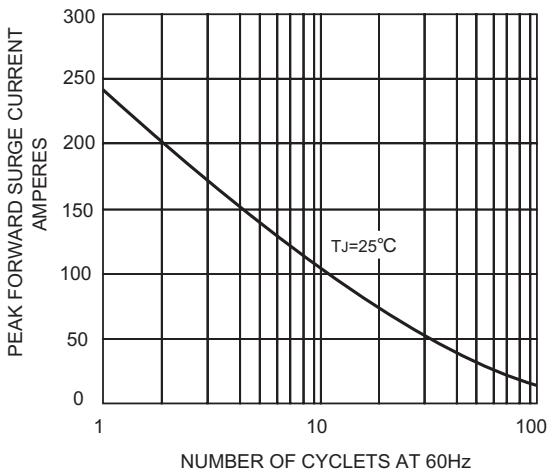


FIG.2-FORWARD CURRENT DERATING CURVE

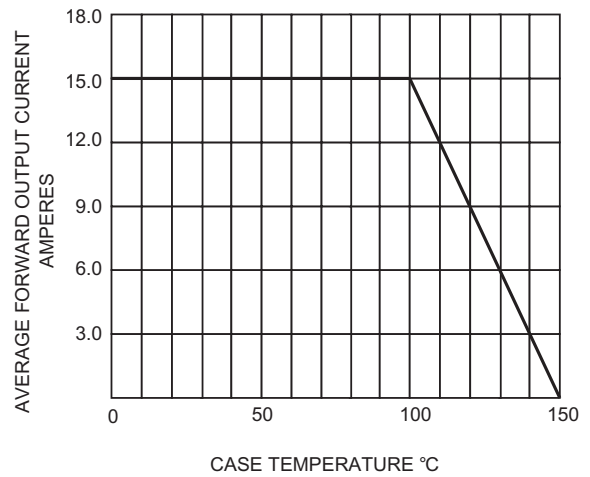


FIG.3-TYPICAL FORWARD CHARACTERISTICS

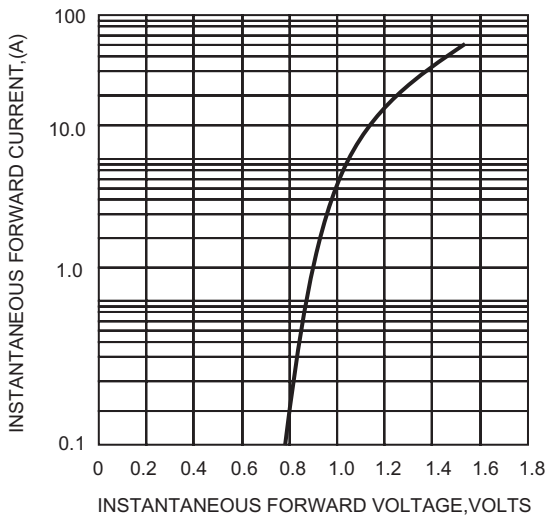


FIG.4 -TYPICAL REVERSE CHARACTERISTICS

