



# GBPC50005 THRU GBPC5010

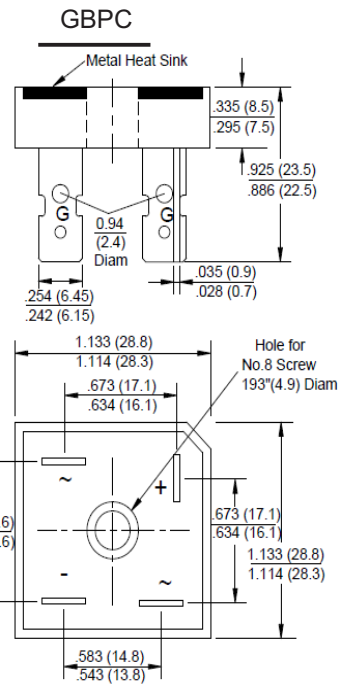
**BRIDGE RECTIFIER**  
 Reverse Voltage: 50 to 1000 Volts  
 Forward Current: 50.0 Amps

## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- High surge forward current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Compliant in accordance to RoHS 2011/65/EU

## APPLICATIONS

- General purpose use in AC/DC bridge full wave rectification, for home appliances, office equipment, etc.



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	GBPC 50005	GBPC 5001	GBPC 5002	GBPC 5004	GBPC 5006	GBPC 5008	GBPC 5010	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	$I(AV)$	50							Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	450							Amps
Rating for fusing (t<8.3ms)	$I^2t$	664							$A^2s$
Maximum Instantaneous Forward Voltage at 25A DC	$V_F$	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage per diode $T_A=25^\circ C$ $T_A=125^\circ C$	$I_R$	10 500							$\mu A$
Typical thermal resistance	$R_{\theta JC}$	1.0							$^\circ C/W$
Operating temperature range	$T_J$	-55 to +150							$^\circ C$
Storage temperature range	$T_{STG}$	-55 to +150							$^\circ C$

# RATINGS AND CHARACTERISTIC CURVES GBPC50005 THRU GBPC5010

FIG.1-MAXIMUM FORWARD SURNGE CURRENT

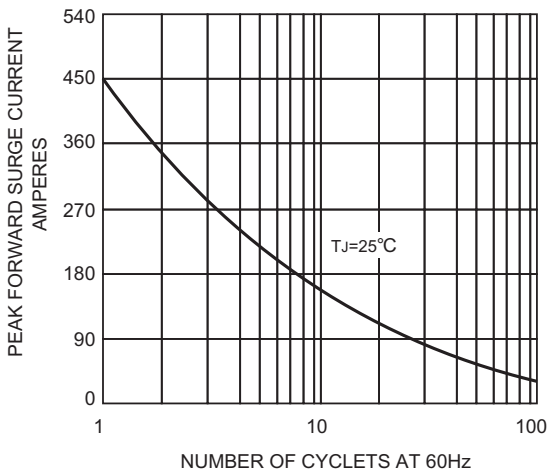


FIG.2-FORWARD CURRENT DERATING CURVE

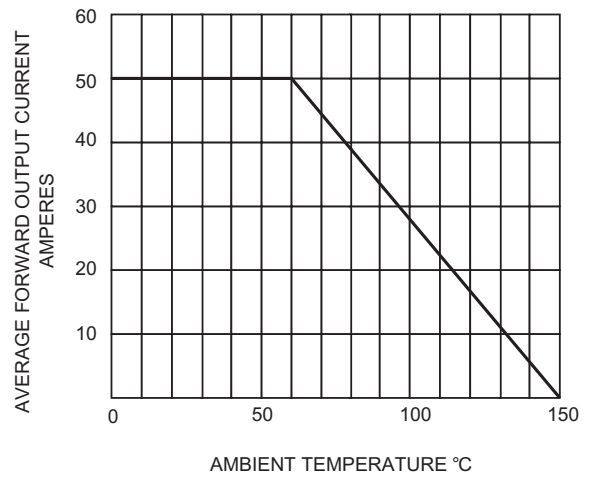


FIG.3-TYPICAL FORWARD CHARACTERISTICS

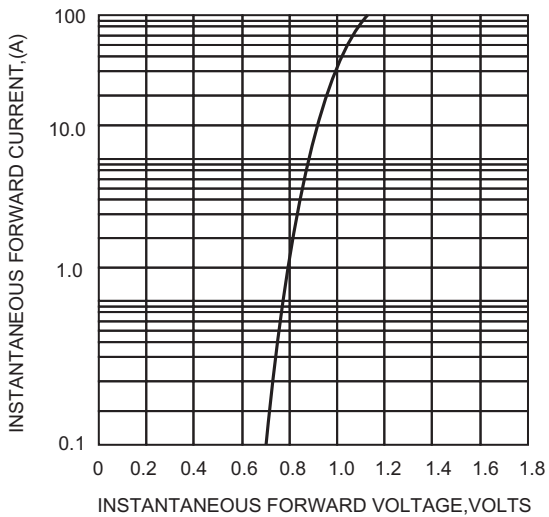


FIG.4 -TYPICAL REVERSE CHARACTERISTICS

