GBPC50005 THRU GBPC5010

SEMICONDUCTOR

BRIDGE RECTIFIER

Reverse Voltage: 50 to 1000 Volts
Forward Current: 50. 0 Amps

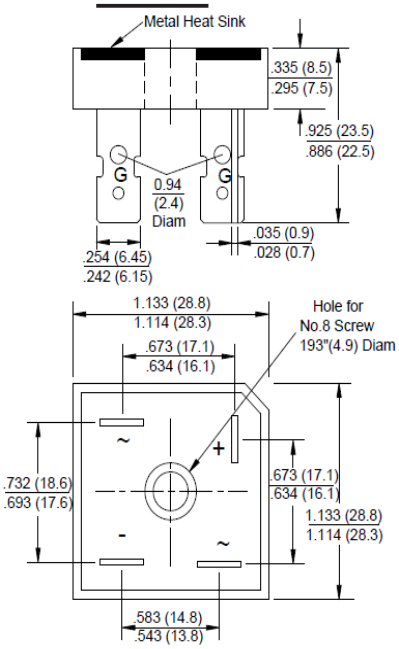
FEATURES

- 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
- Component in accordance to RoHS 2011/65/EU

APPLICATIONS

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

GBPC



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°C T_A=125°C	I_R	10 500							μA
Typical thermal resistence	$R_{\theta JC}$	1. 0							°C/W
Operating temperature range	T_J	-55 to +150							°C
Storage temperature range	T_{STG}	-55 to +150							°C

RATINGS AND CHARACTERISTIC CURVES GBPC50005 THRU GBPC5010

FLG.1-MAXIMUM FORWARD SUNRGE CURRENT

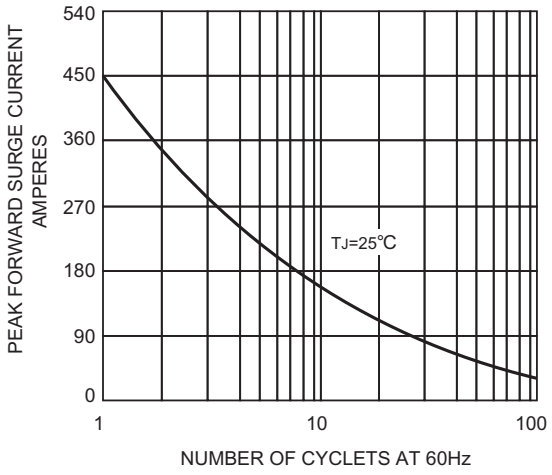


FIG.2-FORWARD CURRENT DERATING CURVE

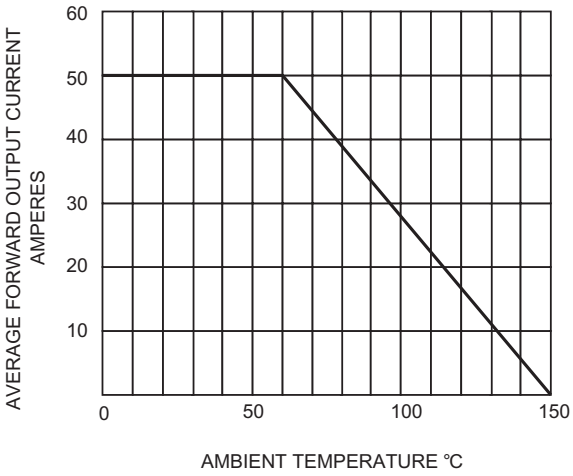


FIG.3-TYPICAL FORWARD CHARACTERISTICS

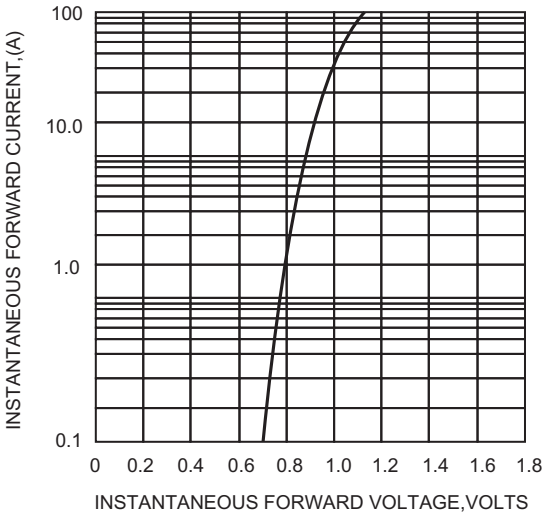


FIG.4 -TYPICAL REVERSE CHARACTERISTICS