

**50 A GLASS PASSIVATED BRIDGE RECTIFIER**

**Reverse Voltage - 100 to 1000 V**

**Forward Current – 50 A**

**Features**

- ✦ Glass passivated die construction
- ✦ Low forward voltage drop
- ✦ High current capability
- ✦ High surge current capability
- ✦ Plastic material-UL flammability 94V-0
- ✦ Lead free in comply with EU RoHS 2011/65/EU directives



**Mechanical Data**

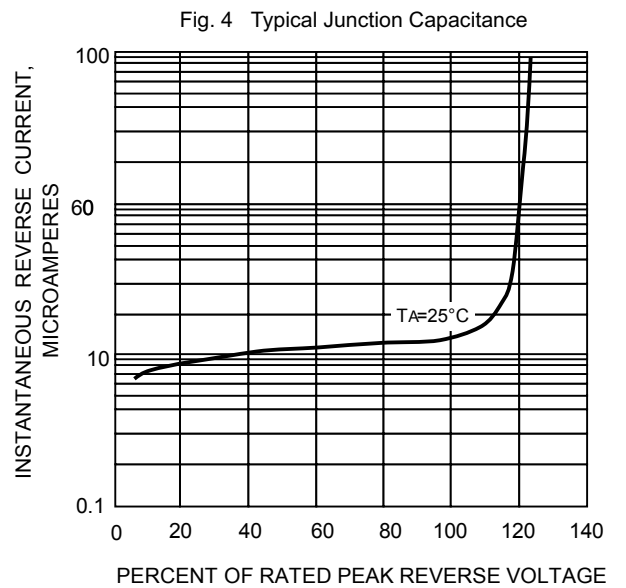
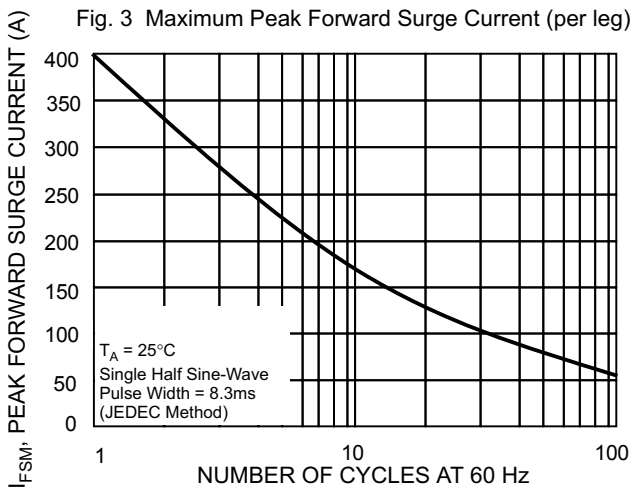
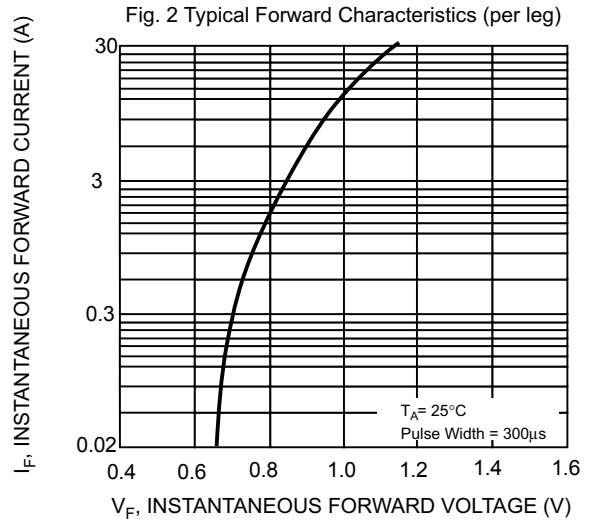
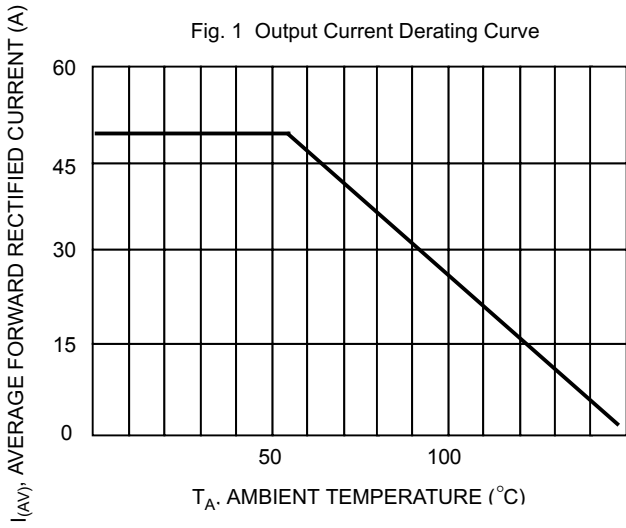
- ✦ Case: GBPC
- ✦ Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- ✦ Polarity: As Marked on Case
- ✦ Mounting Position: Any
- ✦ Marking: Type Number
- ✦ Lead Free: For RoHS / Lead Free Version

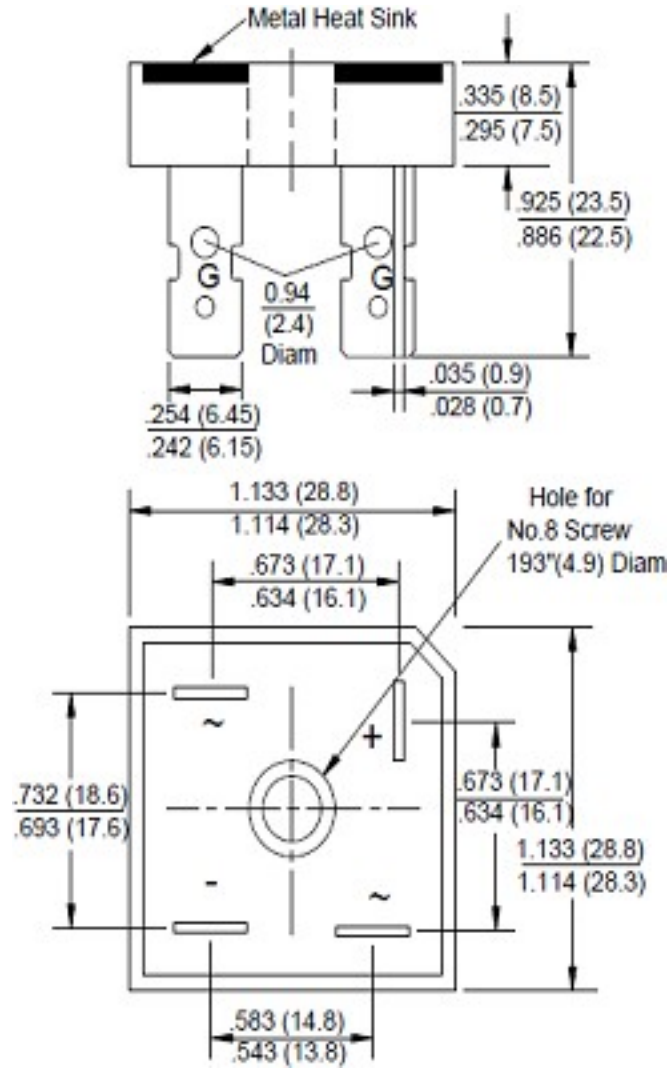
**Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	GBPC 5001	GBPC 5002	GBPC 5004	GBPC 5006	GBPC 5008	GBPC 5010	Units
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Peak Repetitive Reverse Voltage	$V_{RWM}$	70	140	280	420	560	700	V
DC Blocking Voltage	$V_{RMS}$	100	200	400	600	800	1000	V
Average Rectified Output Current (Note1) @TA=55 °C	$I_{(AV)}$	50.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	500						A
Forward Voltage per element @IF =25.0A	$V_F$	1.1						V
Peak Reverse Current @TA=25°C At Rated DC Blocking Voltage @TA=125°C	$I_R$	10.0 500						μA
Typical Junction Capacitance per leg	$C_J$	300						pF
Typical Thermal Resistance per leg (Note 2)	$R_{θJL}$	2.2						°C/W
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150						°C

1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.





**Summary of Packing Options**

Package	Packing Description	Packing Quantity	Industry Standard
GBPC	BOX	50	EIA-481-1