

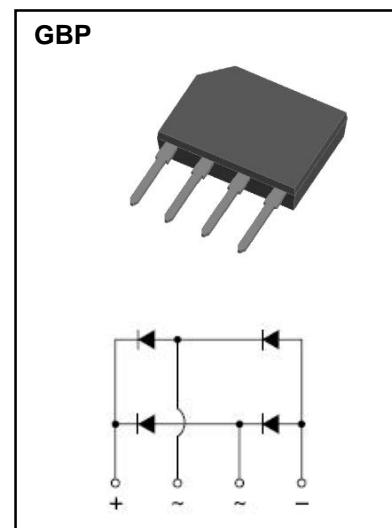
GBP Plastic-Encapsulate Bridge Rectifier

Features

- I_o 6.0A
- VRRM 50V-1000V
- High surge current capability
- Ultra low leakage reverse current
- Ideal for printed circuit boards

Mechanical Data

- Case: GBP molded plastic
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Leads solderable per MIL-STD-750
- Mounting position: Any



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	GBP 6						
				005	01	02	04	06	08	10
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V		35	70	140	280	420	560	700
Maximum DC blocking Voltage	V_{DC}	V		50	100	200	400	600	800	1000
Average Rectified Output Current	I_o	A	60Hz sine wave, R-load, $T_C=100^\circ\text{C}$	6						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, $T_j=25^\circ\text{C}$	150						
Current Squared Time	I^2t	A^2S	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$, Rating of per diode	93.375						
Storage Temperature	T_{stg}	$^\circ\text{C}$		-55 ~+150						
Junction Temperature	T_j	$^\circ\text{C}$		-55 ~+150						

Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max	
Peak Forward Voltage	V_{FM}	V	$I_{FM}=3\text{A}$, Pulse measurement, Rating of per diode	1.1	
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$	10
	I_{RRM2}			$T_a=125^\circ\text{C}$	500
Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	Between junction and ambient	45	
	$R_{\theta J-C}$		Between junction and lead	8	

Typical Characteristics

Fig. 1 Derating Curve for Output Rectified Current

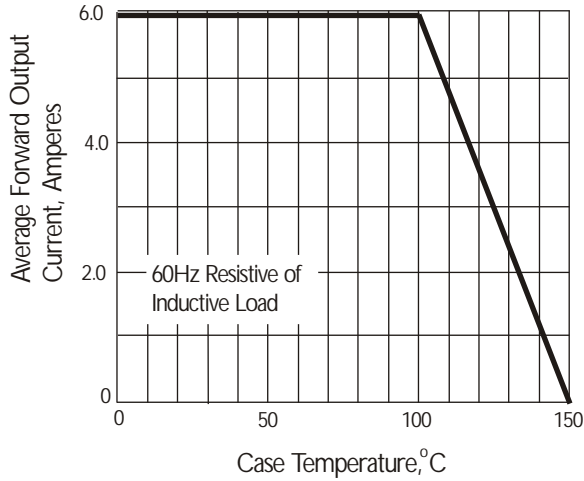


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

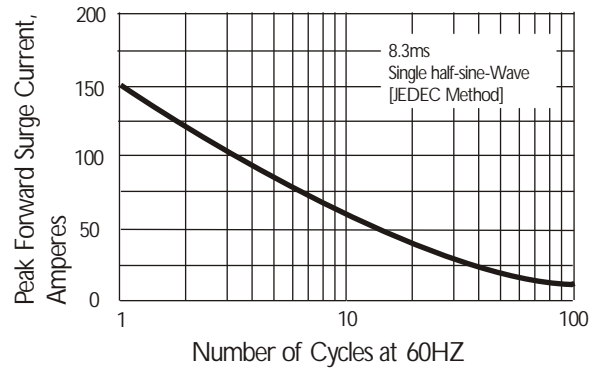


Fig. 3 Typical Instantaneous Forward Characteristics

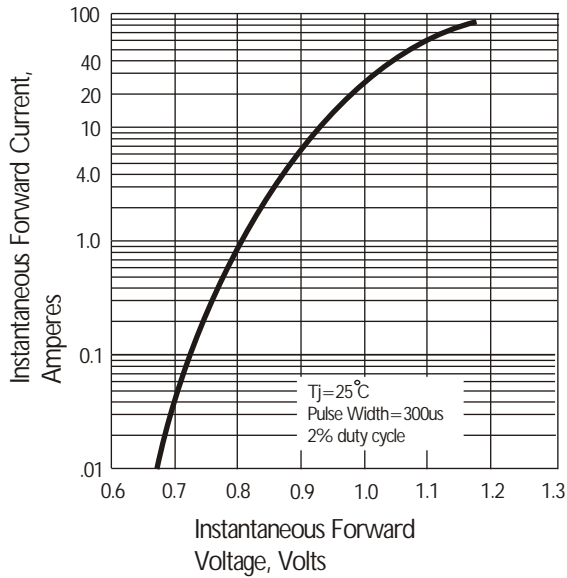


Fig. 4 Typical Reverse Characteristics

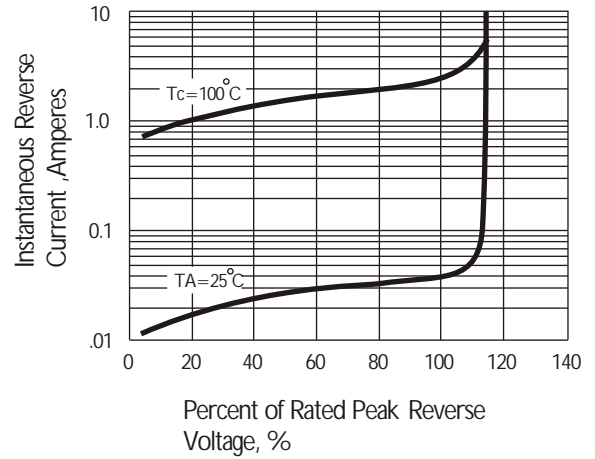
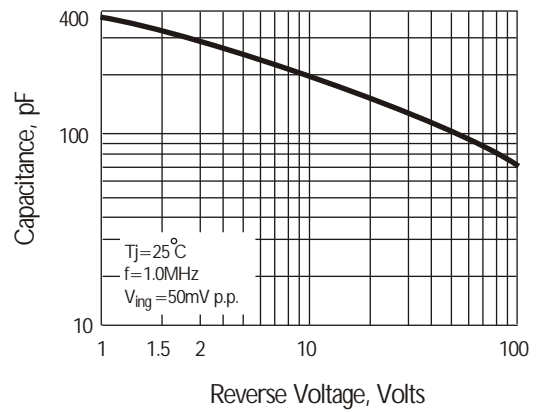


Fig. 5 Typical Junction Capacitance



GBP Package Outline Dimensions

