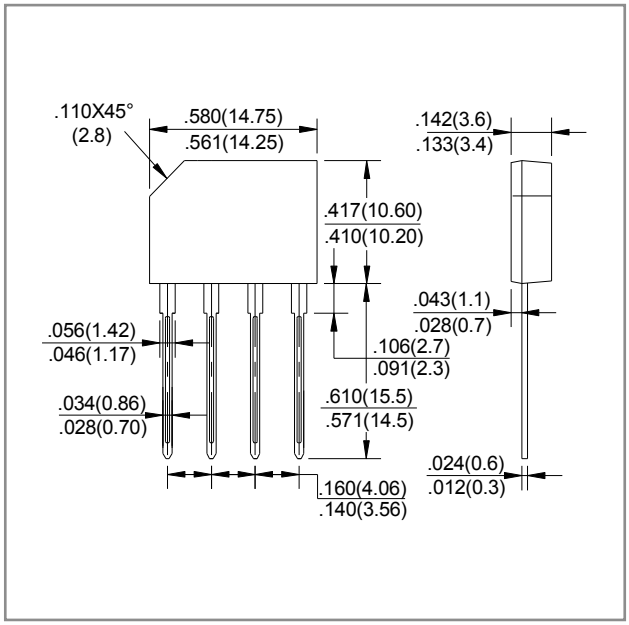
GBP4A THRU GBP4MG

Glass Passivated Bridge Rectifiers

Volatge Rangs - 50 to 1000 Volts
Forward Current - 2.0 Amperes

GBP



Dimensions in inches and (millimeters)

Features

- Surge overload rating - 125 amperes peak
- Ideal for printed circuit board
- Plastic material has underwriters laboratory flammability classification 94V-0
- Mounting position: Any

Maximum Ratings And Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

PARAMETER		SYMBOL	PART NUMBERS							UNIT
			GBP 4AG	GBP 4BG	GBP 4DG	GBP 4G	GBP 4JG	GBP 4KG	GBP 4MG	
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current at T_A=50℃ [1]		$I_{(AV)}$	4.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I_{FSM}	110							A
Maximum Forward Voltage Drop Per Bridge Element at 4.0A Peak		V_F	1.1							V
Maximum Reverse Current at Rated DC Blocking Voltage	T_J=25℃	I_R	5							μA
	T_J=100℃		500							μA
I^2t Rating for Fusing (t<8.3ms)		I^2t	50							A^2S
Typical Junction Capacitance per Element [2]		C_J	40							pF
Typical Thermal Resistance [3]		$R_{\theta JC}$	7.5							℃/W
Operating & Storage Temperature Range		T_J,T_{STG}	-55~150, -55~150							℃

Note: 1. Mounting condition, 0.5" lead length maximum
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
3. Unit mounted on 75mm x 75mm x 1.6mm copper plate heatsink.

FIG.1-MAXIMUM NON-REPETITIVE SURGE CURRENT

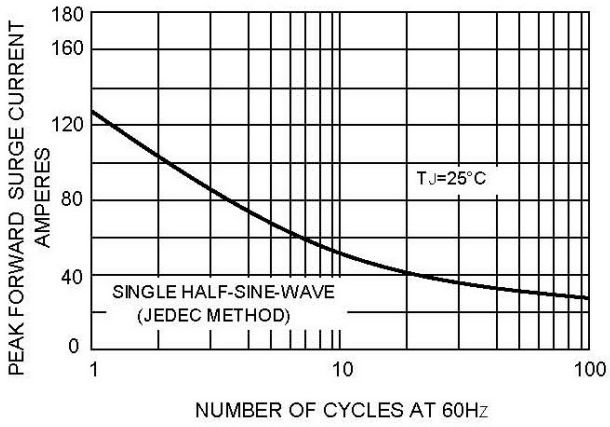


FIG.2-FORWARD DERATING CURRENT

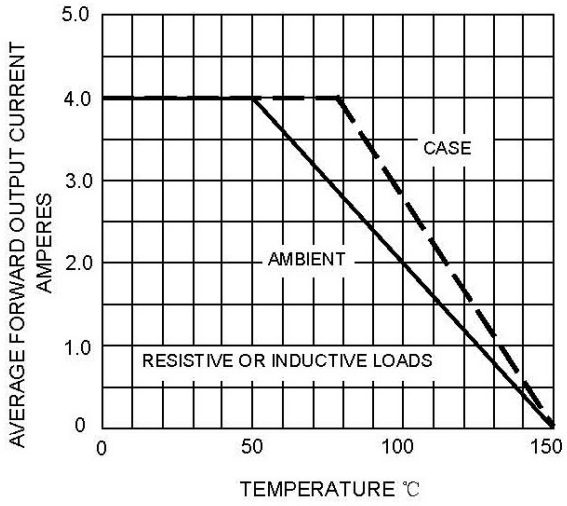


FIG.3-TYPICAL FORWARD CHARACTERISTICS

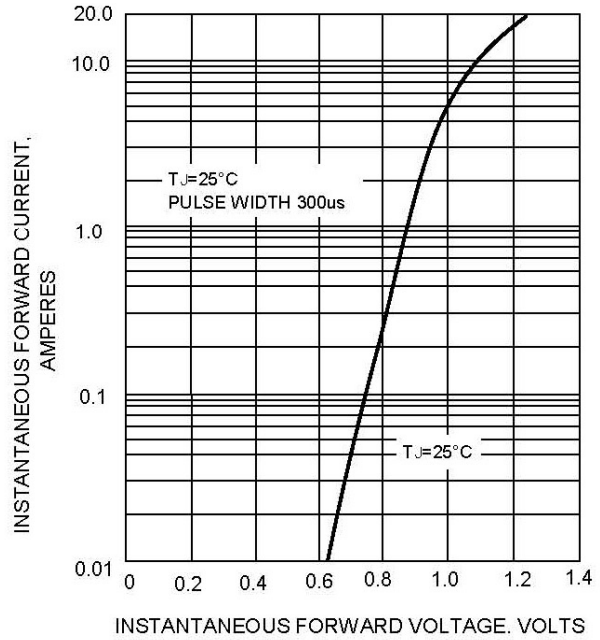


FIG.4-TYPICAL REVERSE CHARACTERISTICS