

Descriptions

4.0A Single-Phase Silicon Bridge Rectifier, Reverse Voltage:50~1000V, GBP package.

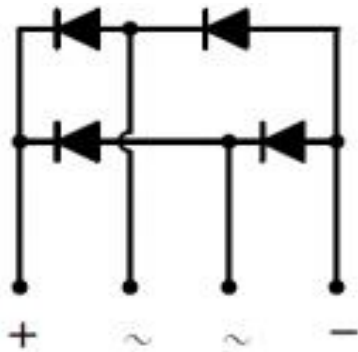
Features

- Ideal for printed circuit board
- Case material molded plastic
- The plastic material has U/L flammability classification 94V-0
- Halogen free product

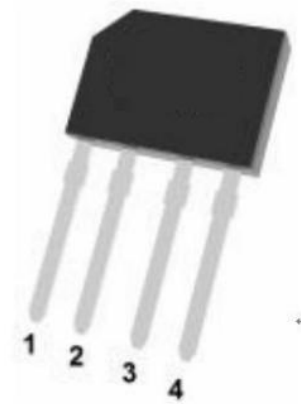
Applications

General purpose

Equivalent Circuit



Pinning



PIN1: DC+ PIN2: AC PIN 3: AC PIN 4: DC-

Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating							Unit
		GBP 4005	GBP 401	GBP 402	GBP 404	GBP 406	GBP 408	GBP 410	
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TC=100°C (with heatsink)	IF(AV)	4.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	135							A
Rating for fusing (t<8.3ms)	I _t	75							A ² s
Typical thermal resistance per element (1)	R _{θJA}	10							°C/W
Operating junction and storage temperature range	T _j , T _{stg}	-55 to +150							°C

Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Rating	Unit
Maximum Forward Voltage	V _F	I _F =4.0A	1.1	V
Maximum DC Reverse Current at rated Blocking Voltage	I _R	@T _j =25°C	10	μA
		@T _j =125°C	1000	

Electrical Characteristic Curve

Fig. 1 Derating Curve for Output Rectified Current

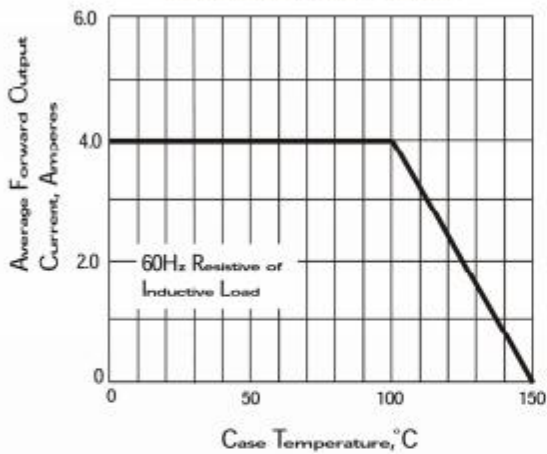


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

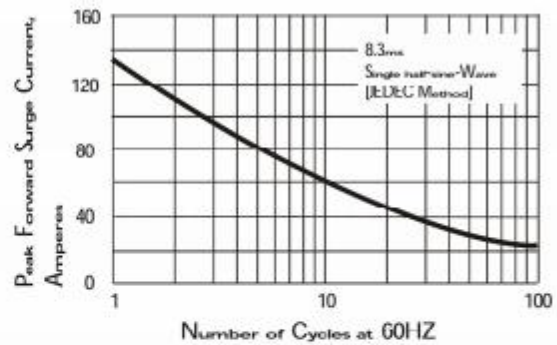


Fig. 3 Typical Instantaneous Forward Characteristics

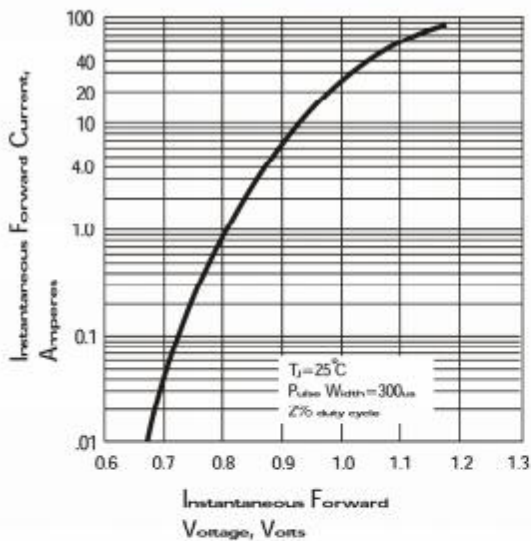


Fig. 4 Typical Reverse Characteristics

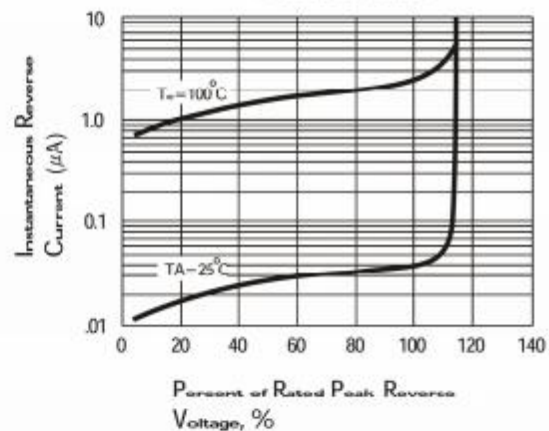
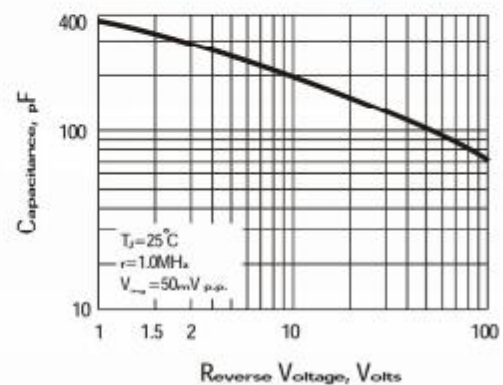
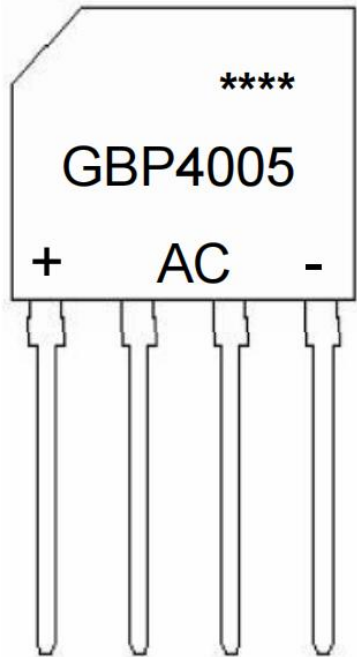


Fig. 5 Typical Junction Capacitance



Marking Instructions



Note:
****: Lot No. Code, code change with Lot No
GBP4005: Product Type
+ AC -: Pin function

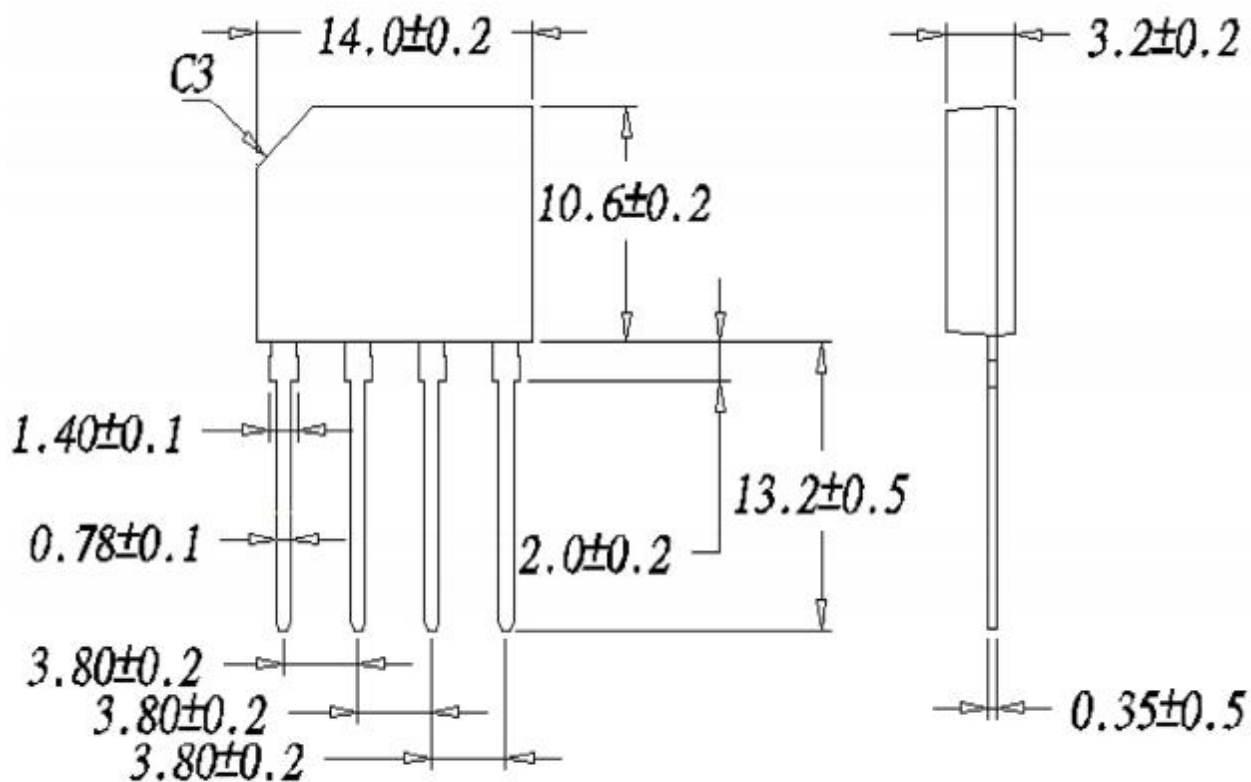
Packaging SPEC

BULK

Package Type	Units					Dimension (unit: mm ³)		
	Units/Bag	Bags/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Bag	Inner Box	Outer Box
GBP	-	-	500	10	5,000	-	-	-

Package Outline Dimensions

GBP



Dimensions in inches and (millimeters)