



GBP4005 THRU GBP410

PINGWEI ENTERPRISE

SINGLE PHASE 4.0AMPS.GLASS PASSIVATED BRIDGE RECTIFIERS

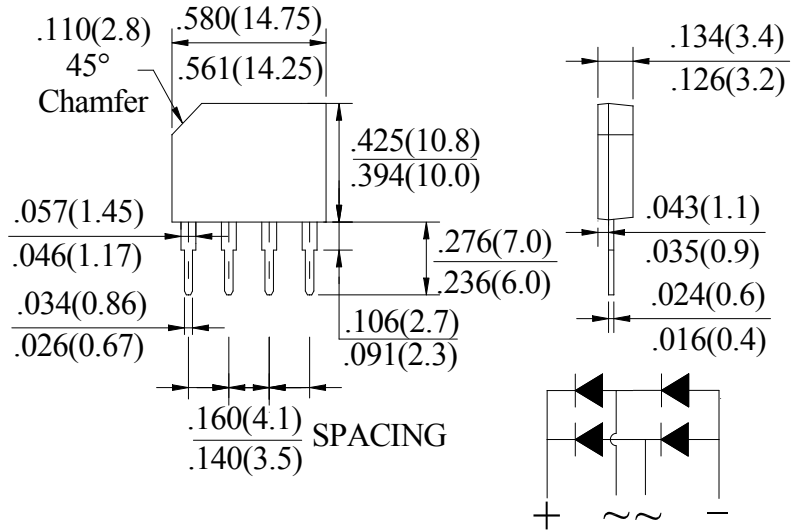
FEATURE

- . UL Listed Under Recognized Component Index, File Number E338195
- . Glass passivated chip junctions
- . High case dielectric strength
- . Low Reverse Leakage Current
- . High surge current capability
- . Ideal for Printed Circuit Board Applications

MECHANICAL DATA

- . Case: GBP
- . Case Material: Molded Plastic.
UL Flammability Classification Rating 94V-0
- . Terminals: Pure tin plated, Lead free.
Leads solderable per MIL-STD-750, Method 2026.
- . Polarity: Marked on body
- . Weight: 1.5 grams
- . Mounting position: Any

GBP



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Type Number	SYM BOL	GBP 4005	GBP 401	GBP 402	GBP 404	GBP 406	GBP 408	GBP 410	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS 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 (with heatsink Note2) Rectified Current @ $T_C=100^\circ\text{C}$ (without heatsink)	$I_{F(AV)}$	4.0 2.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	120							A
Maximum Forward Voltage @ 4.0A DC Drop per element @ 2.0A DC	V_F	1.1 1.0							V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=125^\circ\text{C}$	I_R	5.0 500.0							μA
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	59.7							A^2Sec
Typical Junction Capacitance (Note 1)	C_J	40							pF
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	3.0							$^\circ\text{C}/\text{W}$
Storage Temperature	T_{STG}	-55 to +150							$^\circ\text{C}$
Operating Junction Temperature	T_J	-55 to +150							$^\circ\text{C}$

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES (GBP4005 THRU GBP410)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

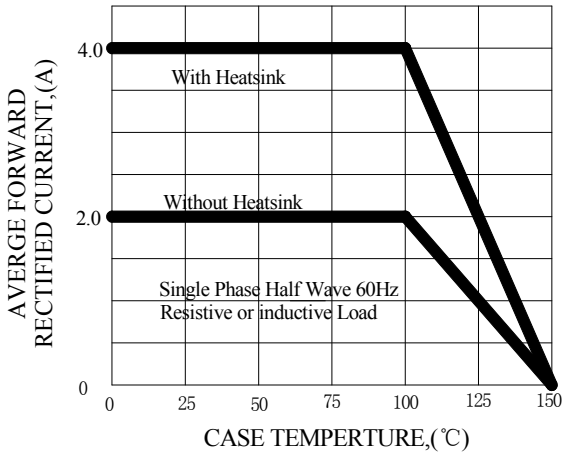


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

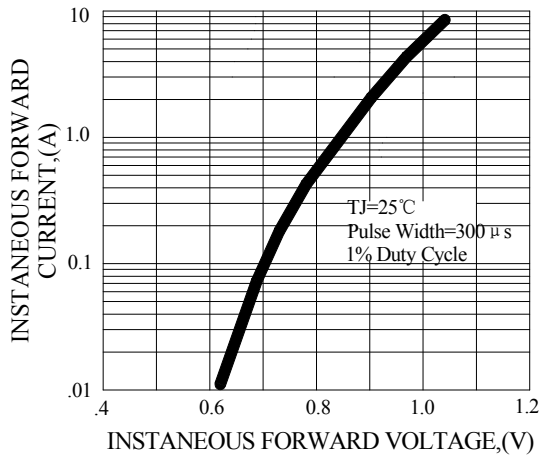


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

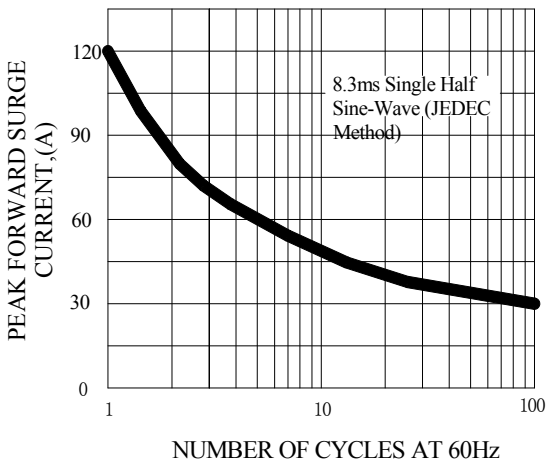


FIG.4-TYPICAL JUNCTION CAPACITANCE

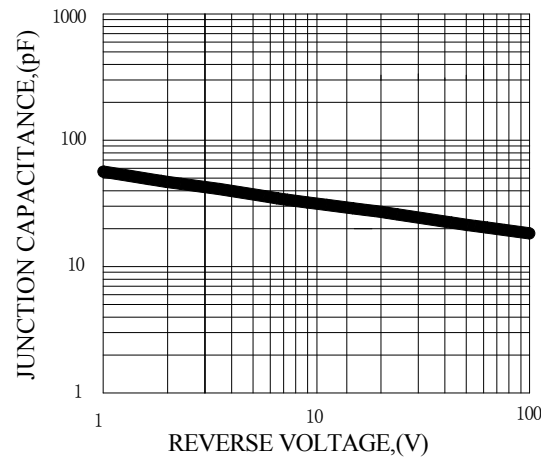


FIG.5-TYPICAL REVERSE CHARACTERISTICS

