Semiconductor *Data Sheet*

2.0 Amp Glass Passivated SINGLE PHASE BRIDGE

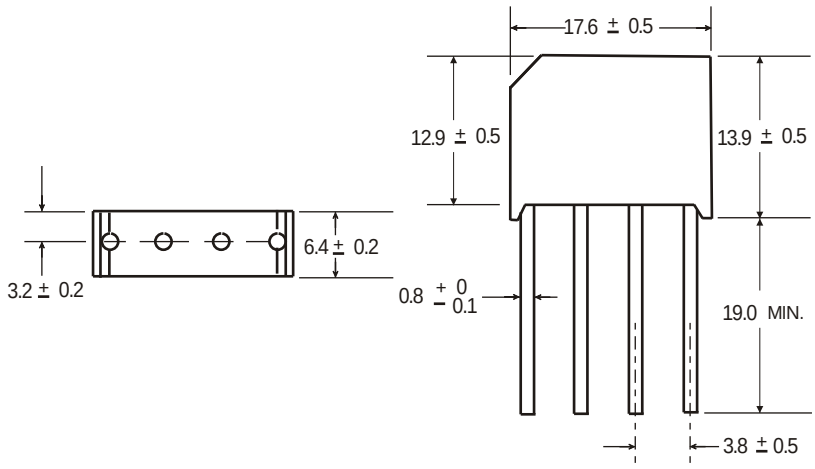
GBP200~210

Description



GBP

Mechanical Dimensions



Dimensions in inches and (millimeters)

Features

- ✶ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ✶ High surge current capability
- ✶ Ideal for printed circuit boards

Mechanical Data

- ✶ Case: Molded plastic body over passivated junctions
- ✶ Terminals: Solderable per MIL-STD-202, method 208
- ✶ Polarity: As marked on body
- ✶ Mounting position: Any
- ✶ Weight: 0.06 ounce, 1.7 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

	SYMBOL	GBP200	GBP201	GBP202	GBP204	GBP206	GBP208	GBP210	UNIT
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 Rectified Current T_A=50°C	$I_{(AV)}$	2.0							A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60							A
Maximum Instantaneous Forward Voltage @ 2.0 A	V_F	1.1							V
Maximum DC Reverse Current @T_J=25°C At Rated DC Blocking Voltage @T_J=125°C	I_R	5.0 500							uA uA
Rating for fusing (t < 8.3ms)	I^2t	15							A^2S
Typical junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance per leg Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	32 14							°C/W
Operating Junctionand Storage Temperature Range	T_J, T_{STG}	-55 to + 150							°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.
(2) Thermal Resistance form junction to ambient mounted on P.C.B with 0.5 x 0.5"(13x13mm) copper pads.

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Fig. 1 Derating Curve for Output Rectified Current

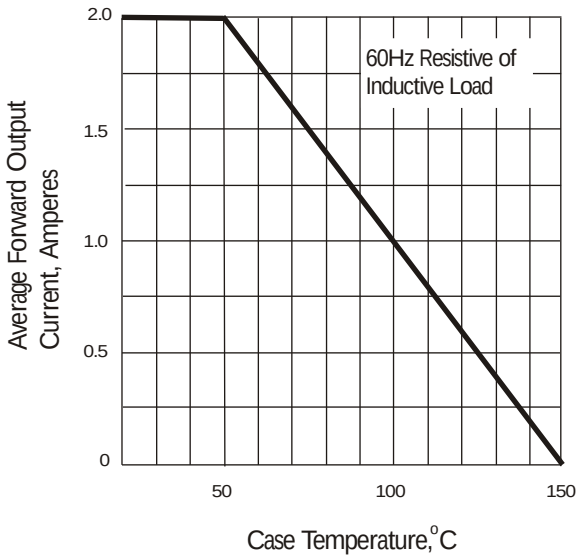


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

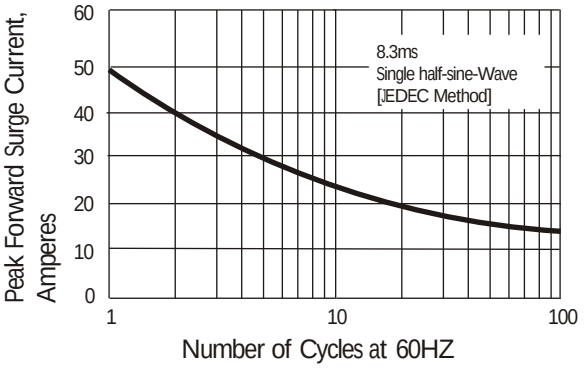


Fig. 3 Typical Instantaneous Forward Characteristics

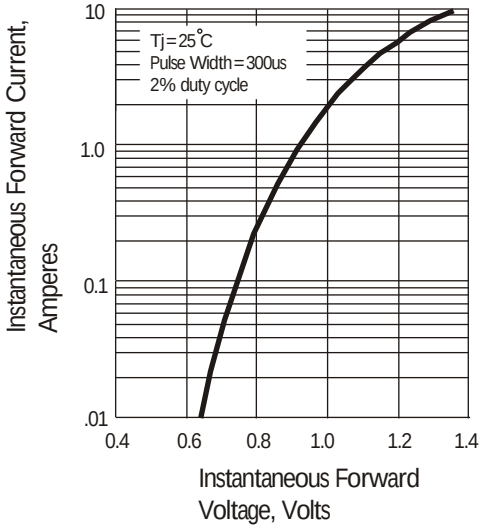


Fig. 4 Typical Reverse Characteristics

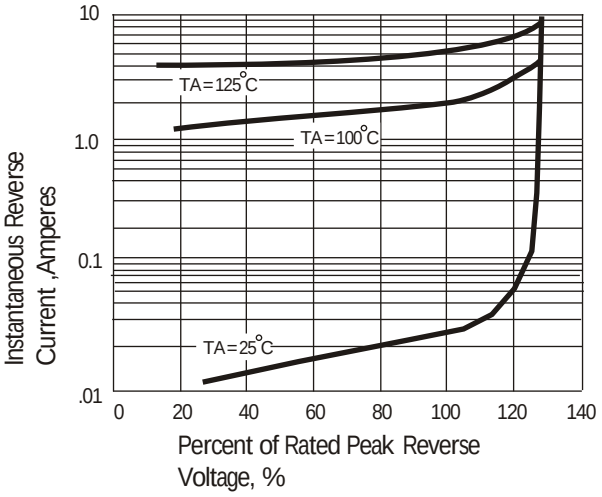


Fig. 5 Typical Junction Capacitance

