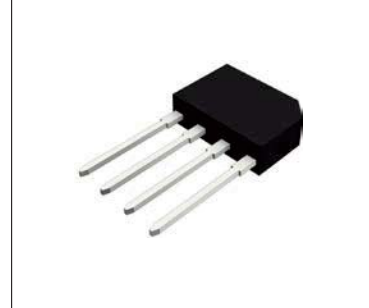


Bridge Rectifiers

GBP2005—GBP210

Features

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Ideal for printed circuit boards
- ◆ Glass passivated chip junction
- ◆ High forward surge capability



Mechanical Data

Case: GBP Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

High temperature soldering guaranteed: 260°C/10 seconds

Mounting Position: Any

Maximum Ratings & Electrical Characteristics

Ratings at $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter		Symbol	GBP 2005	GBP 201	GBP 202	GBP 204	GBP 206	GBP 208	GBP 210	Unit
Maximum repetitive 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
Average forward rectified output current		I _{F(AV)}	2.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	60							A
Rating for fusig (t<8.3ms)		I ² t	15.0							A ² sec
Maximum instantaneous forward voltage dropper leg at 2A		V _F	1.10							V
Maximum DC reverse current at rated DC blocking voltage per leg	T _J =25℃	I _R	5.0							uA
	T _J =125℃		500							

Thermal Characteristics

Typical thermal resistance per leg (Note 1)	$R_{\theta JA}$	32	$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	15	
Operating junction temperature range	T_J	-55 to +150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^\circ\text{C}$

Note

(1) Units mounted on PCB with 0.47×0.47(12×12mm) Copper Pads

Bridge Rectifiers

GBP2005—GBP210

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

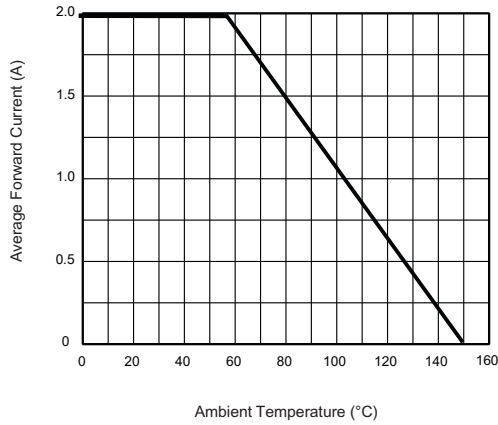


Figure 1. Forward Current Derating Curve

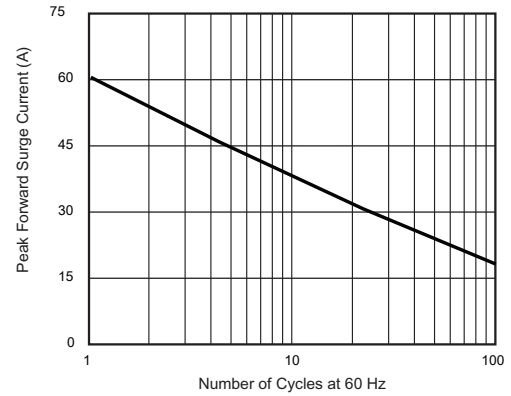


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

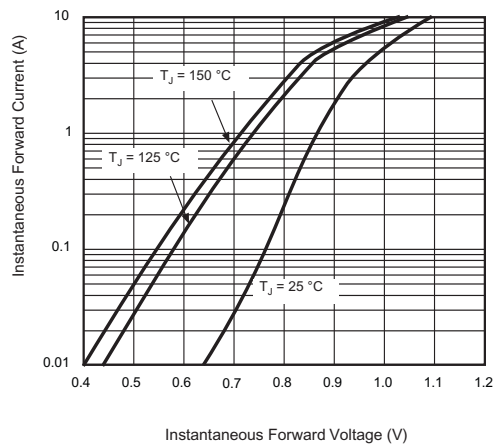


Figure 3. Typical Forward Characteristics Per Diode

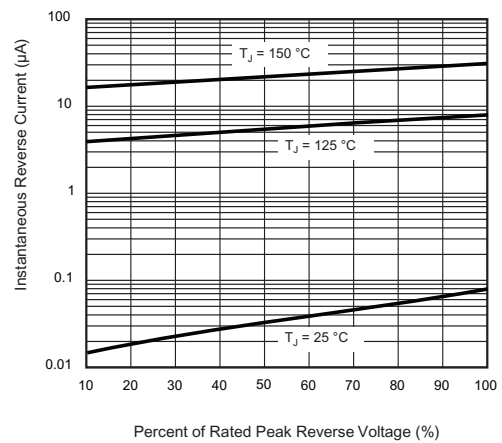


Figure 4. Typical Reverse Leakage Characteristics Per Diode

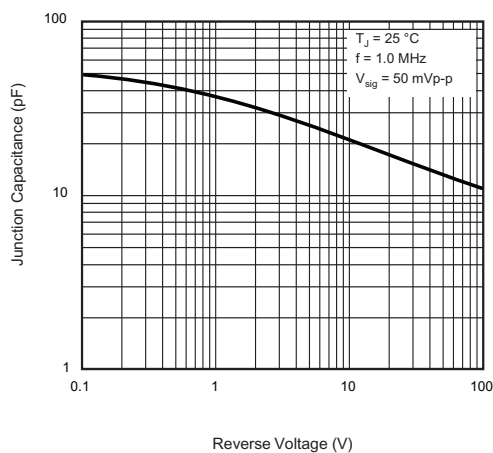


Figure 5. Typical Junction Capacitance Per Diode

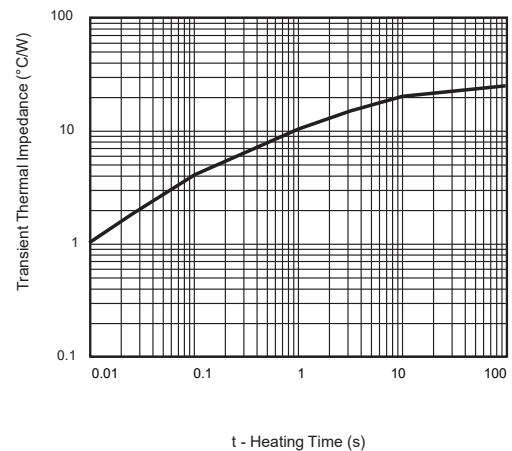
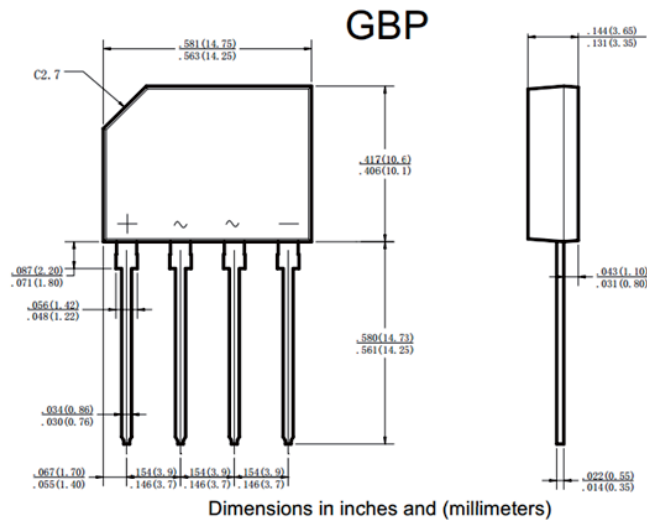


Figure 6. Typical Transient Thermal Impedance Per Diode

Bridge Rectifiers

GBP2005—GBP210

Package Outline Dimensions(unit:mm)



Ordering Information

Part No.	Marking	Package	Shipping	
GBP2005	GBP2005	GBP	300PCS /inner box	3000PCS /Box
GBP201	GBP201	GBP	300PCS /inner box	3000PCS /Box
GBP202	GBP202	GBP	300PCS /inner box	3000PCS /Box
GBP204	GBP204	GBP	300PCS /inner box	3000PCS /Box
GBP206	GBP206	GBP	300PCS /inner box	3000PCS /Box
GBP208	GBP208	GBP	300PCS /inner box	3000PCS /Box
GBP210	GBP210	GBP	300PCS /inner box	3000PCS /Box