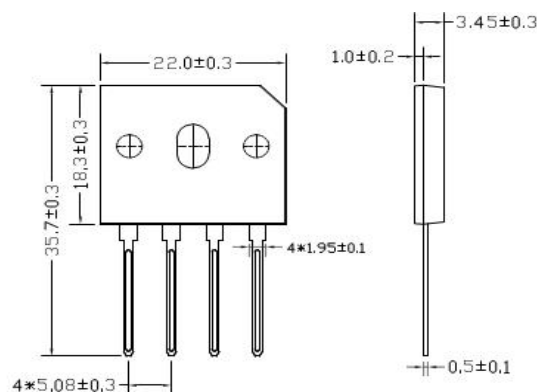


Kingtronics®**GBU4005 THRU
GBU410****SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS**
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 4.0 Ampere**FEATURES**

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: GBU Molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
High temperature soldering guaranteed: 260°C /10 seconds
Mounting Position: Any

GBU**Dimensions in inches and (millimeters)****MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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

PARAMETER	SYMBOL	GBU4005	GBU401	GBU402	GBU404	GBU406	GBU408	GBU410	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
Average forward rectified output current $T_C = 100^\circ\text{C}$ (1) $T_A = 40^\circ\text{C}$ (2)	$I_{F(AV)}$	4.0 3.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125							A
Rating for fusig ($t < 8.3\text{ms}$)	I^2t	64.85							A^2sec
Maximum instantaneous forward voltage dropper leg at 2A	V_F	1.0							V
Maximum DC reverse current at rated DC blocking voltage per leg	$T_J = 25^\circ\text{C}$	5.0							μA
	$T_J = 125^\circ\text{C}$	500							

THERMAL CHARACTERISTICS

Typical thermal resistance per leg (Note 1)	$R_{\theta JA(2)}$	22		$^\circ\text{C} / \text{W}$
	$R_{\theta JL(3)}$	4.2		
Operating junction temperature range	T_J	-55 to +150		$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150		$^\circ\text{C}$

Note

- Unit case mounted on 1.6 x 1.6 x 0.06" thick (4.0 x 4.0 x 0.15 cm) aluminum plate
- Units mounted on P.C.B. with 0.5 x 0.5" (12 x 12 mm) copper pads and 0.375" (9.5 mm) lead length
- Unit case mounted on aluminum plate heatsink

Kingtronics® International Company

RATINGS AND CHARACTERISTIC CURVES ($T_A=25^\circ\text{C}$ unless otherwise noted)

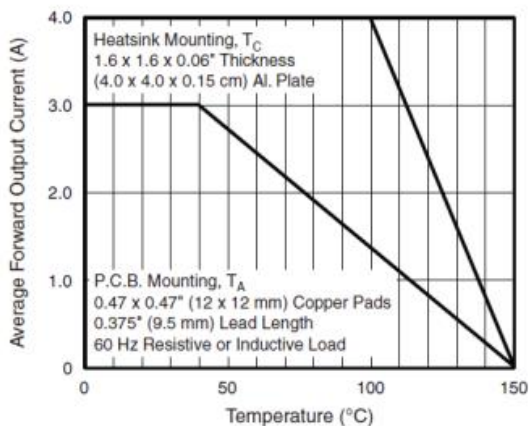


Figure 1. Derating Curve Output Rectified Current

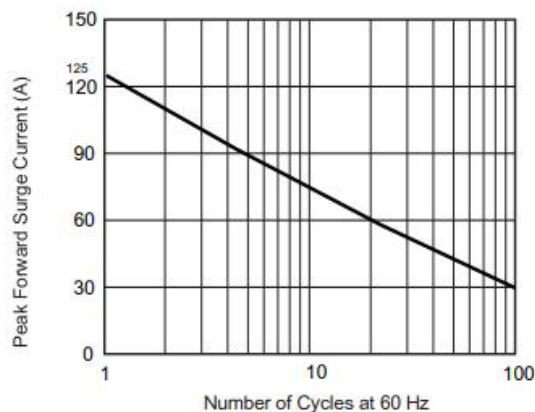


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

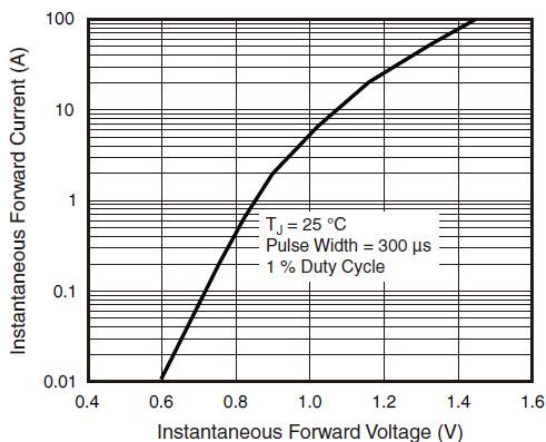


Figure 3. Typical Forward Characteristics Per Diode

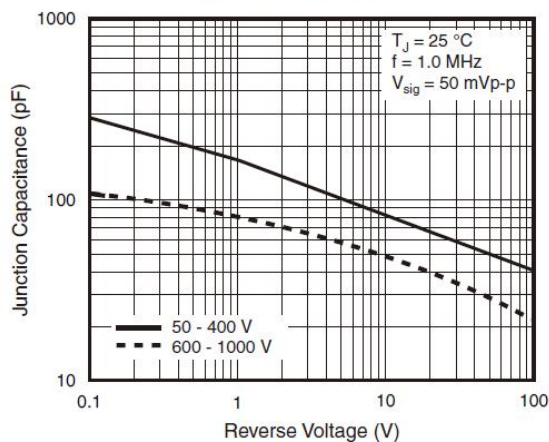


Figure 5. Typical Junction Capacitance Per Diode

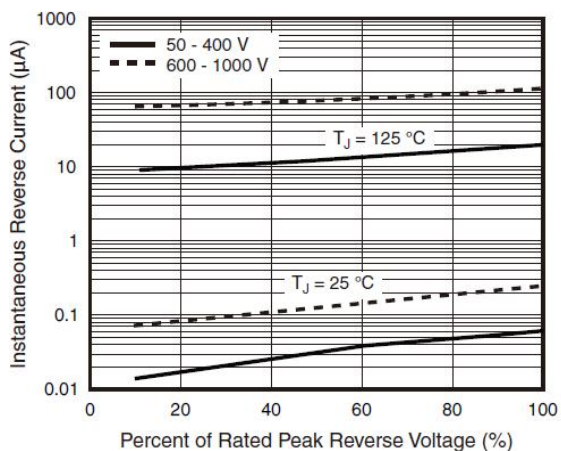


Figure 4. Typical Reverse Leakage Characteristics Per Diode

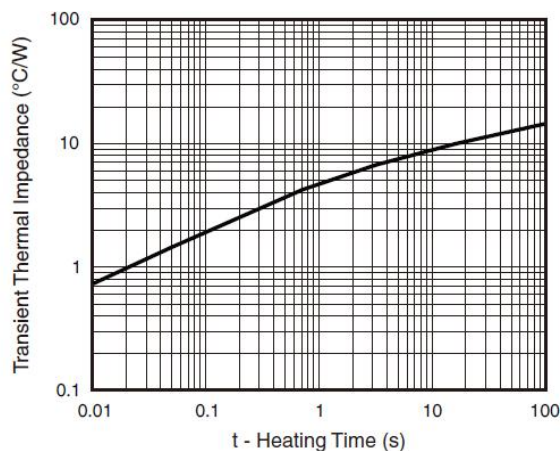


Figure 6. Typical Transient Thermal Impedance

Note: Specifications are subject to change without notice.