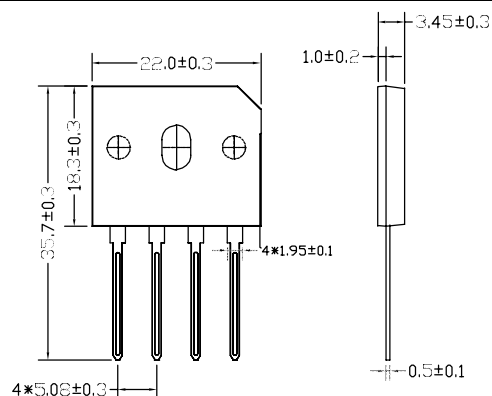


Kingtronics®**GBU10005 THRU
GB1010****SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS**
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 10 Ampere**FEATURES**

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 TA = 25°C unless otherwise specified**

PARAMETER	SYMBOL	GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	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 $T_C = 80^\circ\text{C}$ With heatsink $T_A = 25^\circ\text{C}$ Without heatsink	$I_{F(AV)}$					10.0 3.2				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}					175				A
Rating for fusig (t<8.3ms)	I^2t					127				A ² sec
Maximum instantaneous forward voltage dropper leg at 5A	VF					1.0				V
Maximum DC reverse current at rated DC blocking voltage per leg	IR					5.0 500				uA

THERMAL CHARACTERISTICS

Typical thermal resistance per leg (Note 1)	$R_{\theta JA(2)}$	25	°C/W
	$R_{\theta JL(1)(3)}$	2.3	
Operating junction temperature range	T_J	-55 to +150	°C
Storage temperature range	T_{STG}	-55 to +150	°C

Note

- Unit case mounted on aluminum plate heatsink
- 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
- Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screws

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GBU10005 THRU GB1010

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

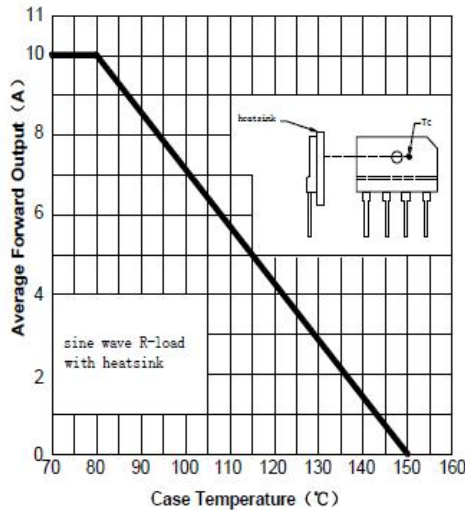


Fig.1-Forward Current Derating Curve

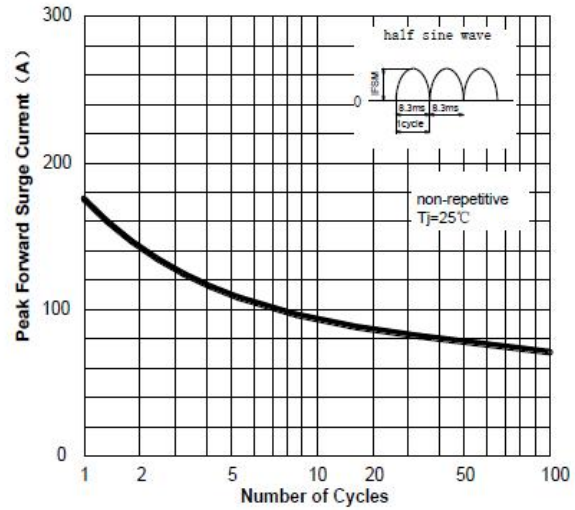


FIG2: Surge Forward Current Capability

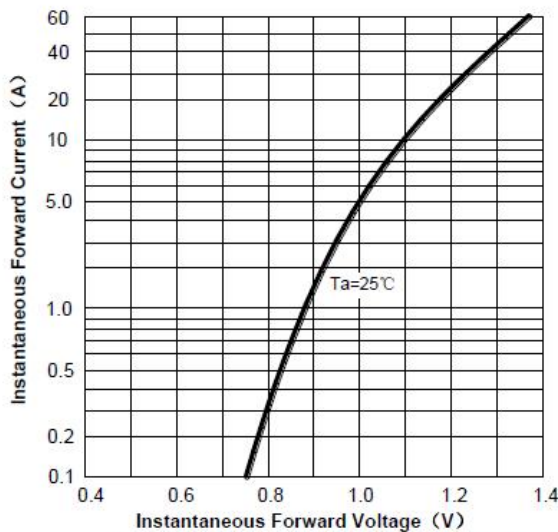


Fig.3- Typical Forward Voltage Characteristic

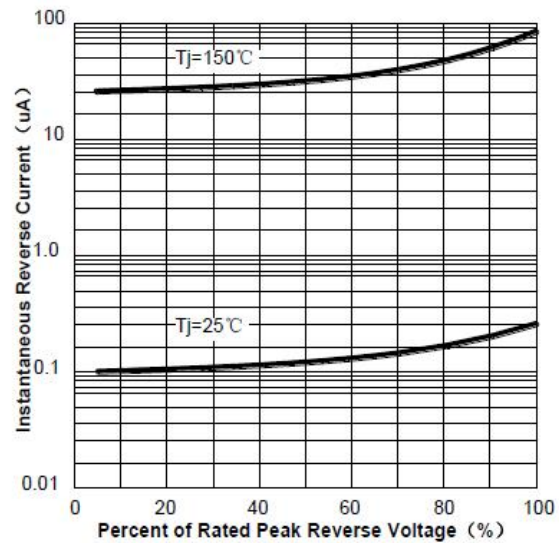


FIG4: Typical Reverse Characteristics

Note: Specifications are subject to change without notice.

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