

Kingtronics®**GBJ20005 THRU
GBJ2010**

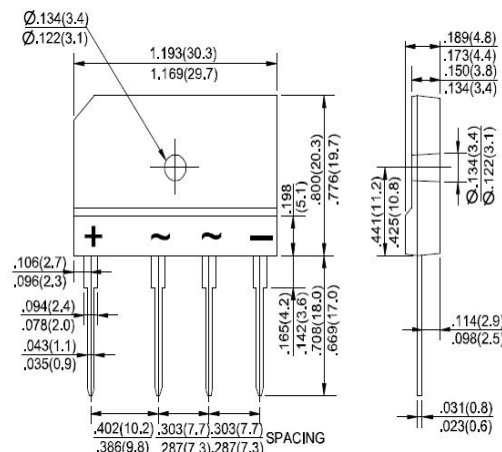
SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 20 Ampere

FEATURES

Rating to 1000V PRV
 Ideal for printed circuit board
 Low forward voltage drop, high current capability
 Reliable low cost construction utilizing molded plastic technique results in inexpensive product
 The plastic material has UL flammability classification 94V-0
 Electrically isolated base-1500 Volts

MECHANICAL DATA

Polarity: Symbols molded on body
 Weight: 0.26 ounces, 7.0 grams
 Mounting position : Any

GBJ**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%

Dimensions in inches and (millimeters)

PARAMETER	SYMBOL	GBJ20005	GBJ2001	GBJ2002	GBJ2004	GBJ2006	GBJ2008	GBJ2010	UNIT
Maximum Recurrent Peak Reverse	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 Note 2) Rectified Current @ $T_C=110^{\circ}\text{C}$ (without	$I_{(AV)}$	20.0 3.5							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I_{FSM}	260							A
Maximum forward Voltage at 10A DC	V_F	1.05							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							uA
I^2t Rating for fusing($t<8.3\text{ms}$)	I^2t	240							A ² S
Typical Junction Capacitance per element(Note 1)	C_J	60							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	0.8							$^{\circ}\text{C/W}$
Operating Temperature Range	T_J	-55 to +150							$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^{\circ}\text{C}$

1- Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2- Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

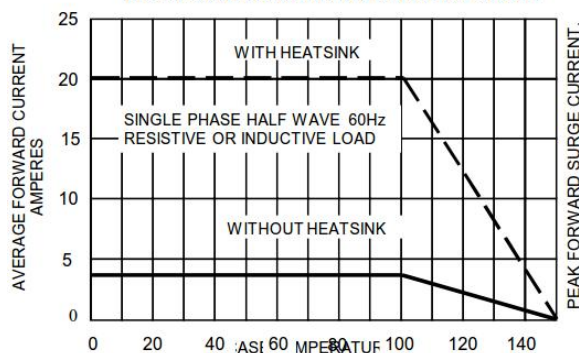


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

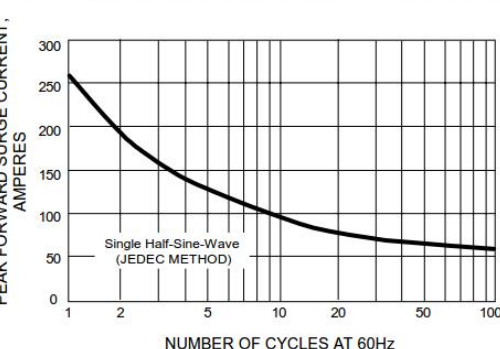


FIG.3 - TYPICAL JUNCTION CAPACITANCE

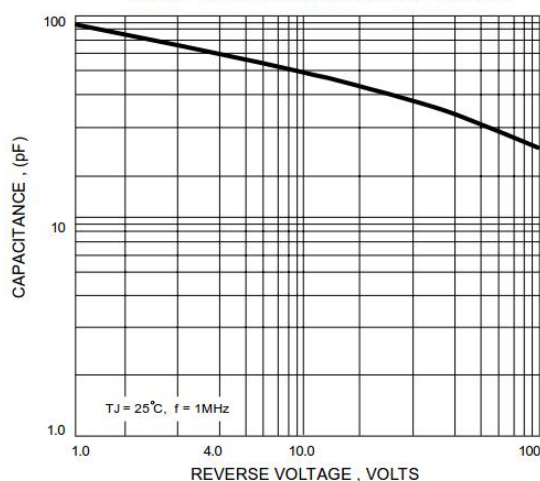


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

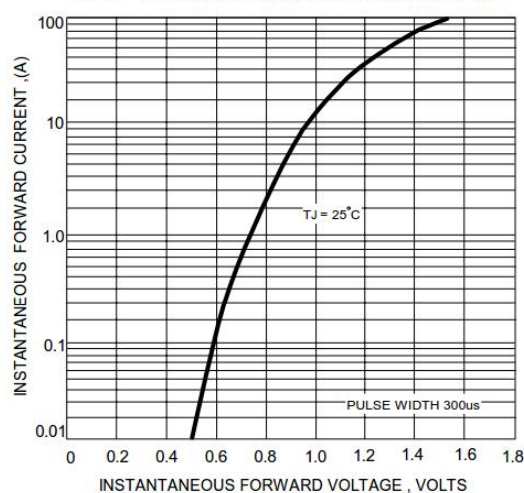
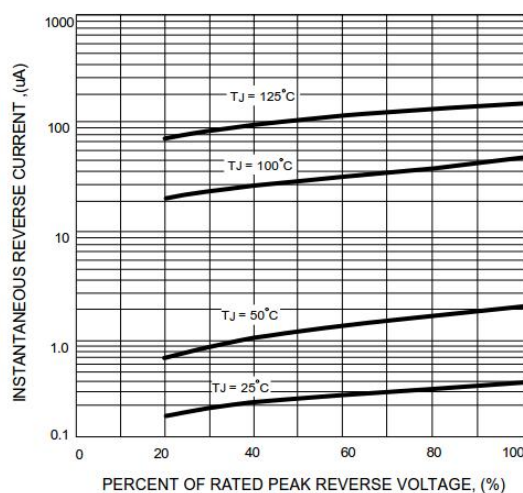


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice.

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