

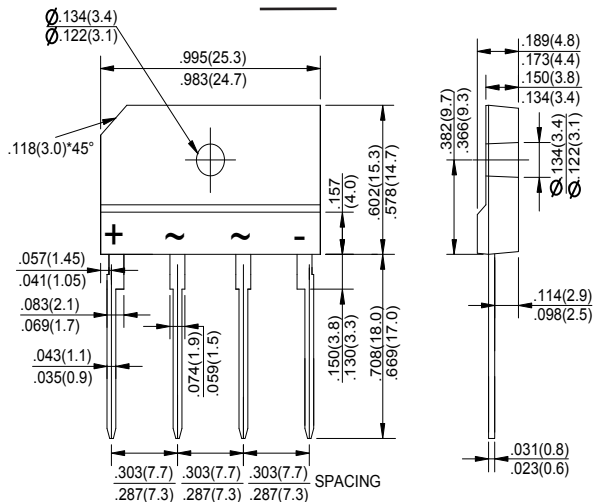


4GBJ10005 THRU 4GBJ1010

GLASS PASSIVATED BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 10.0 Amperes

4GBJ



Dimensions in inches and (millimeters)

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 U/L flammability classification 94V-0

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 current derate by 20%.

MDD Catalog Number	SYMBOLS	4GBJ 10005	4GBJ 1001	4GBJ 1002	4GBJ 1004	4GBJ 1006	4GBJ 1008	4GBJ 1010	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward (with heatsink NOTE 2) Rectified current @ $T_C=100^\circ\text{C}$ (without heatsink)	$I_{(AV)}$					10.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}					210.0			Amps
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t					183			A ² s
Maximum forward voltage at 5.0A DC	V_F					1.0			Volts
Maximum forward voltage at 10.0A DC	V_F					1.1			Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	I_R					10			μA
						500			μA
Typical Junction Capacitance (Note 1)	C_J					55			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$					1.4			$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J					-55 to +150			$^\circ\text{C}$
storage temperature range	T_{STG}					-55 to +150			$^\circ\text{C}$

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

2. Device mounted on 75mm*75mm*1.6mm cu plate heatsink.

3. The typical data above is for reference only().



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RATINGS AND CHARACTERISTIC CURVES 4GBJ10005 THRU 4GBJ1010

FIG.1-FORWARD CURRENT DERATING CURVE

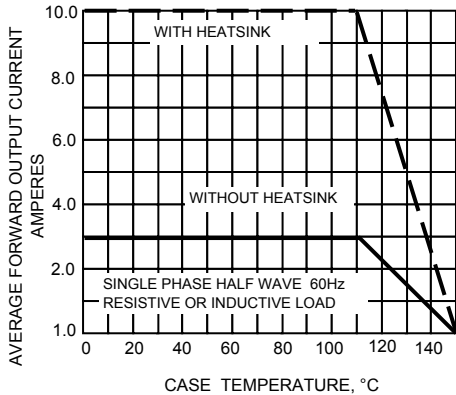


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

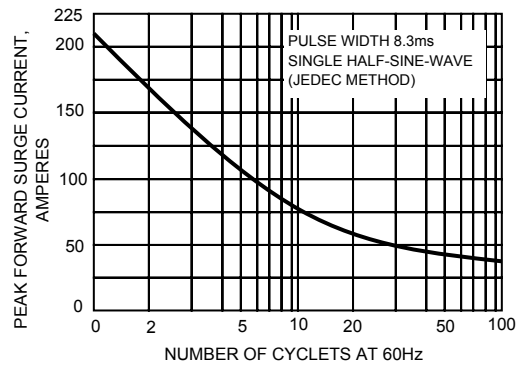


FIG.3-TYPICAL JUNCTION CAPACITANCE

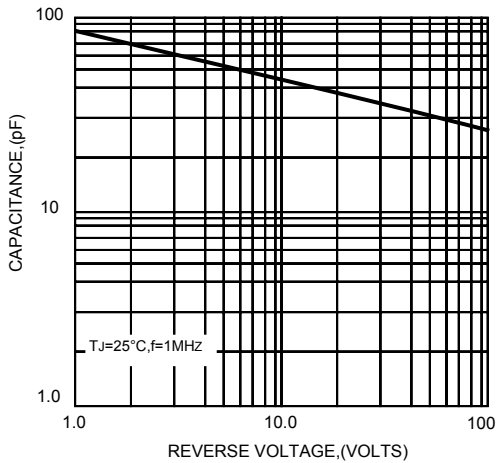


FIG.4-TYPICAL FORWARD CHARACTERISTICS

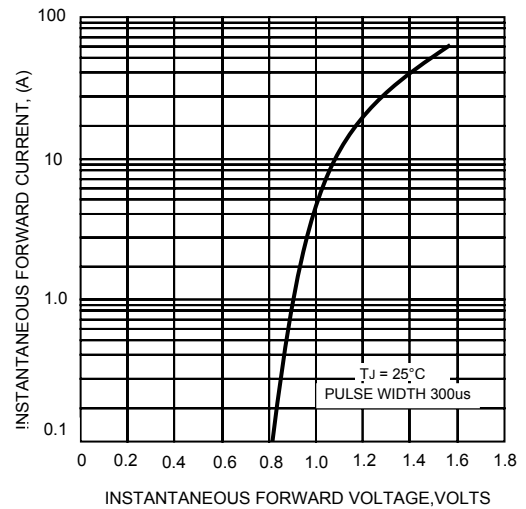
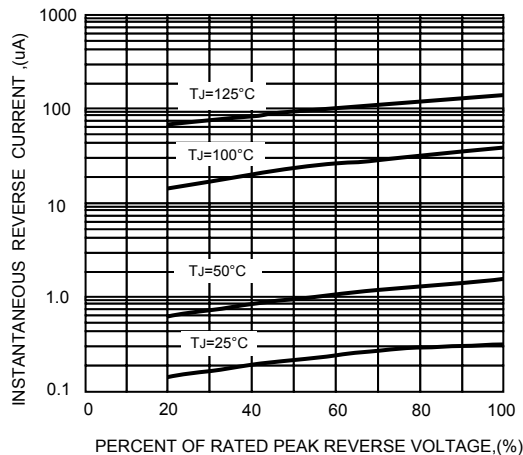


FIG.5-TYPICAL REVERSE CHARACTERISTICS



The cruve graph is for reference only, can't be the basis for judgment()!

