

GLASS PASSIVATED BRIDGE RECTIFIERS

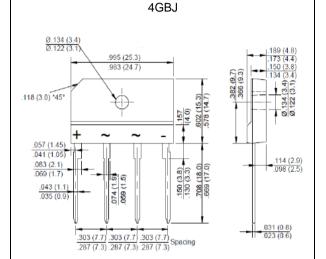
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 10 Amperes

FEATURES

- · Ideal for printed circuit board
- · Low forward voltage drop
- · High surge current capability
- · Glass passivated chip

MECHANICAL DATA

- Polarity: As marked on Body
- · Mounting position: Any



Dimensions in inches and (millimeters)

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%

Characteristics	Symbol	4GBJ 10005	4GBJ 1001	4GBJ 1002	4GBJ 1004	4GBJ 1006	4GBJ 1008	4GBJ 1010	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note2) Rectified Current @TC=100°C (without heatsink)	I(AV)	10 3							Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	210							А
Peak Forward Voltage Per Diode at 5A DC	V_{F}	1							V
Maximum DC Reverse Current @Tj=25°C at Rated DC Blocking Voltage @Tj=125°C	I _R	5 500							μA
I ² t Rating for Fusing (t<8.3ms)	l ² t	183							A ² s
Typical Junction Capacitance Per Element (Note1)	CJ	55							pF
Typical Thermal Resistance to Ambient (without heatsink)	$R_{\theta JA}$	24							°C/W
Typical Thermal Resistance to case (with heatsink Note2)	$R_{\theta JC}$	1.4							°C/W
Typical Thermal Resistance to lead (without heatsink)	$R_{\theta JL}$	3							°C/W
Junction and StorageTemperature Range	$T_{J,} T_{STG}$	-55 to +150							°C

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

2.Device mounted on 150mm*150mm*1.6mm Cu plate heatsink.

Fig. 2 - Maximum Non-Repetitive Surge Current



Rating and Characteristic Curves

Fig. 1 - Forward Current Derating Curve

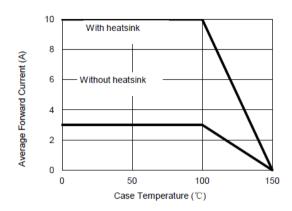


Fig. 3 - Typical Reverse Characteristics

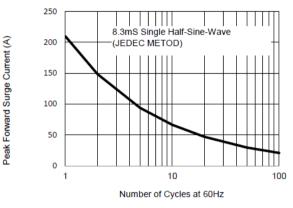


Fig. 4 - Typical Forward Characteristics

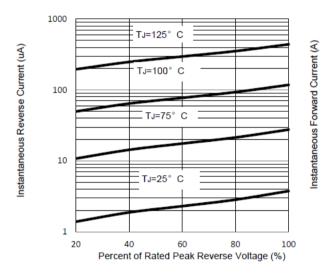
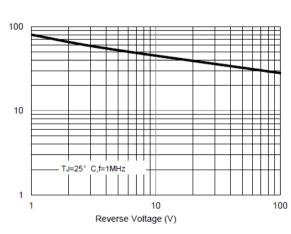


Fig. 5 - Typical Junction Capacitance



Capacitance (pF)

