

Elektronische Bauelemente

GBJ4A ~ GBJ4M

VOLTAGE 50V ~ 1000V

4.0 AMP Glass Passivated Bridge Rectifiers

RoHS Compliant Product A suffix of "-C" specifies halogen-free.

FEATURES

- . Surge overload rating 125 amperes peak
- . Ideal for printed circuit board
- Reliable low cost construction utilizing Molded plastic technique
- Plastic material has underwrites laboratory Flammability classification 94V-0
- . Polarity: marked on body
- . Mounting position: Any



Dimensions in inches and (millimeters)

•MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25 $^\circ\!C$ ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz, For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBJ4A	GBJ4B	GBJ4D	GBJ4G	GBJ4J	GBJ4K	GBJ4M	UNITS
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
Maximum Average Forward (with heatsink Note2)	Luca	4.0 2.4							А
Rectified Current @ Tc=100°C (without heatsink)	I(AV)								
Peak Forward Surge Current, 8.3 ms single		125							A
half Sine-wave superimposed	IFSM								
on rated load (JEDEC method)									
Maximum Forward Voltage at 2.0A	VF	1.1							V
Maximum DC Reverse Current Ta=25 °C	I.	5.0 500							μΑ
at Rated DC Blocking Voltage Ta=125 $^\circ\!\mathbb{C}$	IR								
I ² t Rating for fusing (t<8.3ms)	l ² t	93							A ² S
Typical Junction Capacitance	C	45							pF
per element (Note1)	CJ								
Typical Thermal Resistance (Note 2)	R _{eJC}	2.2							°C/W
Operating Temperature Range	TJ	- 55 ~ + 150							°C
Storage Temperature Range	T _{STG}	- 55 ~ + 150							°C

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.



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FIG. 2 - TYPICAL FORWARD CHARACTERISTICS







FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT PEAK FORWARD SURGE CURRENT, AMPERES 125 100 T.=150°C SINGLE SINE-WAVE (JEDEC METOHD) 80 60 40 20 Single Half-Sine-Way (JEDEC METHOD) Ū 2 50 100 1 5 10 20 NUMBER OF CYCLES AT 60Hz

FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

