Glass Passivated Bridge Rectifier multicomp



## **Features**

- Rating 600V 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**

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

Characteristic	Symbol	Values	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	600	v
Maximum RMS Voltage	VRMS	420	
Maximum DC Blocking Voltage	VDC	600	
Maximum Average Forward (with heatsink Note 2) Rectified Current @ Tc = 100°C (without heatsink)	I(AV)	6 2.8	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	IFSM	170	
Typical Forward Voltage at 3A DC	VF	0.89	v
Maximum Forward Voltage at 3A DC		0.9	
Maximum DC Reverse Current@ TJ = 25°Cat Rated DC Blocking Voltage@ TJ = 125°C	IR	10 120	μA
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	l <sup>2</sup> t	120	A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note1)	Сл	55	pF
Typical Thermal Resistance	Rejc	1.8	°C/W
Operating Temperature Range	TJ		°C
Storage Temperature Range	Тѕтс	-55 to +150	

Notes:

- 1. Measured at 1MHz and applied reverse voltage of 4V 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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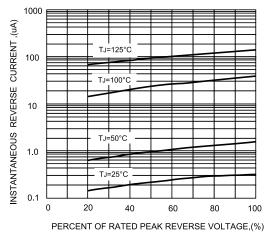
FIG.1-FORWARD CURRENT DERATING CURVE

FLG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

### 6.0 AVERAGE FORWARD CURRENT AMPERES 200 PEAK FORWARD SURGE CURRENT, WITH HEATSIN PULSE WIDTH 8.3ms 5.0 SINGLE HALF-SINE-WAVE (JEDEC METHOD) 150 4.0 WITHOUT HEATSINK AMPERES 3.0 100 2.0 SINGLE PHASE HALF WAVE 60Hz RESISTIVE OR INDUCTIVE LOAD 50 1.0 0.00 0 0 20 40 60 80 100 120 140 2 5 10 20 50 100 0 CASE TEMPERATURE, °C NUMBER OF CYCLETS AT 60Hz FIG.4-TYPICAL FORWARD CHARACTERISTICS FIG.3-TYPICAL JUNCTION CAPACITANCE 20.0 100 10.0 INSTANTANEOUS FORWARD CURRENT, AMPERES CAPACITANCE, (pF) 1.0 10 0.1 ΓJ=25°C TJ=25°C f=1MHz 1.0 1.0 10.0 100 0.01 0.4 0.6 0.8 1.0 1.2 0 0.2 REVERSE VOLTAGE,(VOLTS) INSTANTANEOUS FORWARD VOLTAGE. VOLTS

# **Rating and Characteristic Curves**

FIG.5-TYPICAL REVERSE CHARACTERISTICS



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1.4

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## 4GBJ Ø.134(3.4) Ø.122(3.1) .189(4.8) .995(25.3) .173(4.4) .983(24.7) .150(3.8) <u>382(9.7)</u> 366(9.3) 134(3.4) $\frac{134(3 4)}{122(3 1)}$ .118(3.0)\*45° 5.3) 4 157 (4 0) 602(1 ØØ .057(1.45) .041(1.05) 114(2.9) .083(2.1) 708(18.0) 669(17.0) .098(2.5) 150(3.8) 130(3.3) .069(1.7) 074(1 9) 059(1 5) .043(1.1) .035(0.9) .031(0.8) $\begin{array}{c} 303(7.7) \\ \hline .287(7.3) \\ \hline .287(7.3)$ .023(0.6) SPACING

Dimensions : Inches (Millimetres)

**Dimension:** 

## Part Number Table

Description	Part Number	
Glass Passivated Bridge Rectifier	4GBJ606U	

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