



# GBU20005-GBU2010/G

Single Phase 20.0Amp Glass passivated Bridge Rectifiers

#### Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- · Glass passivated Junction chip
- · Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250°C/10 seconds at terminals
- The G suffix is uses for photoresist chip, otherwise it is a knife scraping chip

#### **MECHANICAL DATA**

- Case: Molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbol marking on body
- Mounting Position: Any

### Maximum Ratings And Electrical Characteristics (@T<sub>A</sub>=25°C unless otherwise noted)

Symbol	Parameter	GBU 20005	GBU 2001	GBU 2002	GBU 2004	GBU 2006	GBU 2008	GBU 2010	Unit
V <sub>RRM</sub>	repetitive peak reverse voltage	50	100	200	400	600	800	1000	V
V <sub>RMS</sub>	RMS voltage	35	70	140	280	420	560	700	V
V <sub>DC</sub>	DC blocking voltage	50	100	200	400	600	800	1000	V
I <sub>AV</sub>	Maximum average forward rectified current with heatsink	20.0					A		
I <sub>FSM</sub>	Peak forward surge current, 8.3ms single half sine-wave	220.0				А			
l <sup>2</sup>	$I_t^2$ Rating for fusing (t=8.3ms,T_A=25°C)	200.86					A <sub>S</sub> <sup>2</sup>		
V <sub>F</sub>	Forward Voltage at 10.0A	1.10				V			
I <sub>R</sub>	Peak Reverse Current@T <sub>A</sub> =25°C	5.0						uA	
	at rated DC blocking voltage@ $T_A$ =125°C	500							
CJ	Typical junction capacitance (Note 1)	70			pF				
$R_{qJA}$	Typical thermal resistance	26			°C/W				
TJ	Operation Temperature Range	-55 to +150					- °C		
T <sub>STG</sub>	Storage Temperature Range	-55 to +150							

Note:(1)Measured at 1MHz and applied reverse voltage of 4.0V D.C.

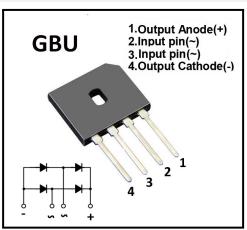
(2)Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

(3) Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.

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Mechanical Data





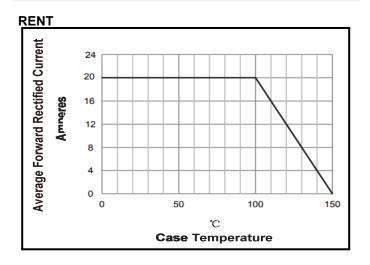


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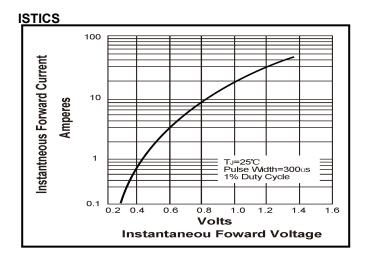
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#### **Ratings And Characteristic Curves**

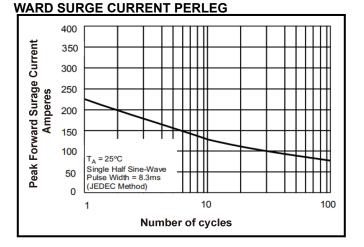
### Figure 1: DERATING CURVE OUTPUT RECTIFIED CUR-



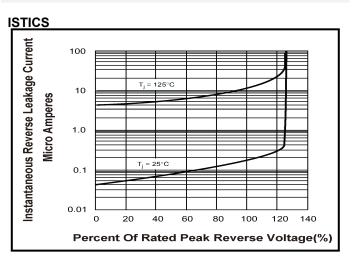
#### Figure 3: TYPICAL FORWARD VOLTAGE CHARACTER-



### Figure 2: MAXIMUM NON-REPETITIVE PEAK FOR-







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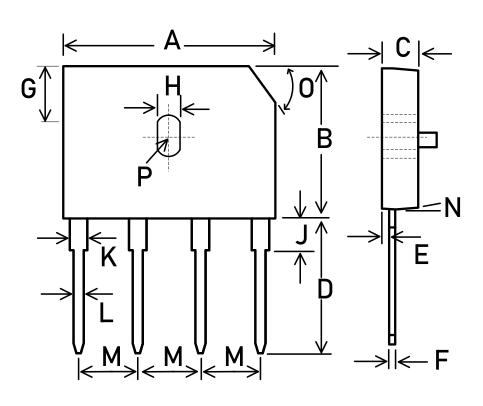




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## Outline Drawing -GBU



SYMDOL	MILLIMETER				
SYMBOL	MIN.	MAX.			
A	21.80	22.30			
В	18.30	18.80			
С	3.30	3.60			
D	17.50	18.00			
E	0.76	1.00			
F	0.45	0.55			
G	7.40	7.90			
Н	3.50	4.10			
I	1.65	2.16			
J	2.25	2.75			
К	2.00	2.40			
L	1.00	1.30			
М	4.83	5.33			
N	7.0° TYP.				
0	(3.2)x45°				
Р	1.90PADIUS				

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