



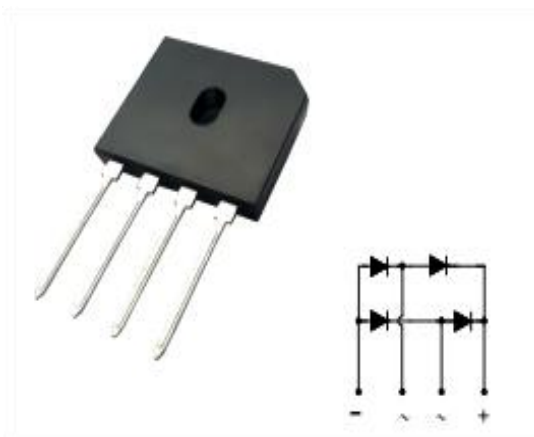
GBU20005 THRU GBU2010

Single Phase 20.0AMP Glass Passivated Bridge Rectifier

1.Features

- Glass Passivated Die Construction
- Low forward voltage drop
- High surge current capability
- Plastic material-UL flammability 94V-0
- High current capability

GBU



2.Mechanical Data

- Case:GBU Molded Plastic .
- Terminals:Plated Leads Solderable per MIL-STD-202,Method208
- Polarity:As Marked on Case.
- Marking Information: Type Number.
- Mounting Position : Any.
- Lead Free: For RoHS / Lead Free Version

3.Maximum Ratings and Electrical Characteristics

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

Type Number	Symbol	GBU 20005	GBU 2001	GBU 2002	GBU 2004	GBU 2006	GBU 2008	GBU 2010	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _{DC}								
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _C =90°C	I _{F(AV)}	(with heatsink) 20 (without heatsink) 3.4							A
Non-Repetitive Peak Forward Surge Current @T _J =25°C	I _{FSM}	320							A
8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) @T _J =125°C		256							
Non-Repetitive Peak Forward Surge Current 1ms @T _J =25°C	I _{FSM}	640							A
Single half sine-wave superimposed on rated load (JEDEC Method) @T _J =125°C		512							
I ² t Rating for fusing (t <8.3ms)	I ² t	425							A ² s
Forward Voltage per element @I _F =10A	V _{FM}	1.0							V
Peak Reverse Current @T _J =25 °C	I _R	5							uA
At Rated DC Blocking Voltage @T _J =125 °C		200							
Dielectric Strength	V _{ids}	2500							V
The proposed installation torque	Tor	5							Kgf.cm
Max torque		8							
Typical Junction Capacitance (Note 1)	C _J	90							pF
Typical Thermal Resistance	R _{θJA}	28							°C/W
	R _{θJC}	8.7							
	R _{θJL}	5.3							
Operating Temperature Range	T _J	-55 to+150							°C
Storage Temperature Range	T _{STG}	-55 to+150							°C

Note:

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



4. Rating And Characteristic Curves

Fig. 1 Forward Current Derating Curve

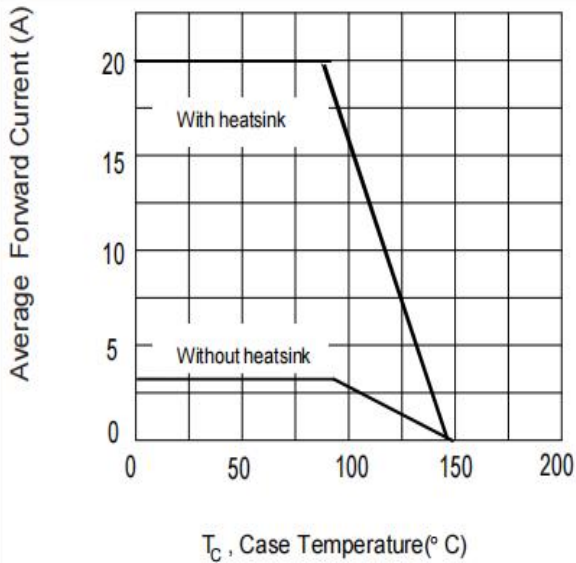


Fig. 2 Typ. Forward Characteristics

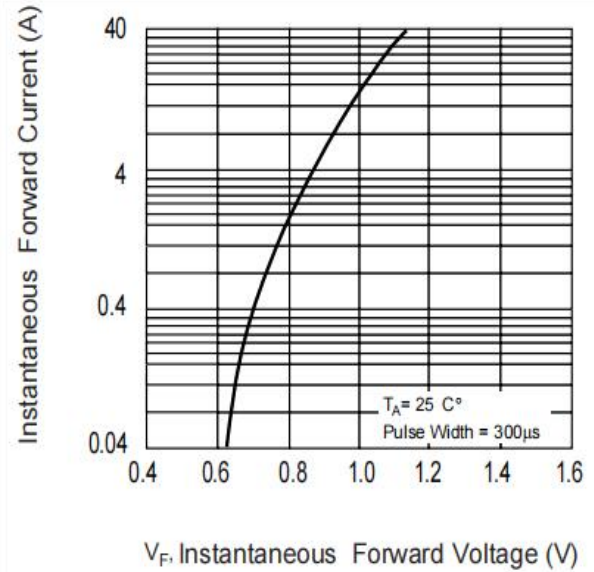


Fig.3 Maximum Peak Forward Surge Current

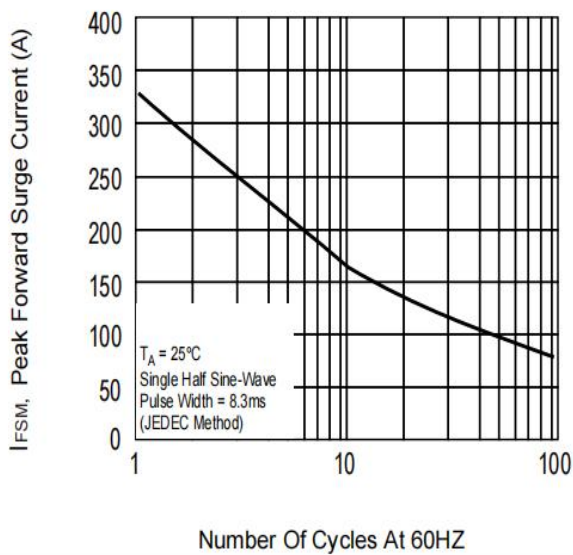
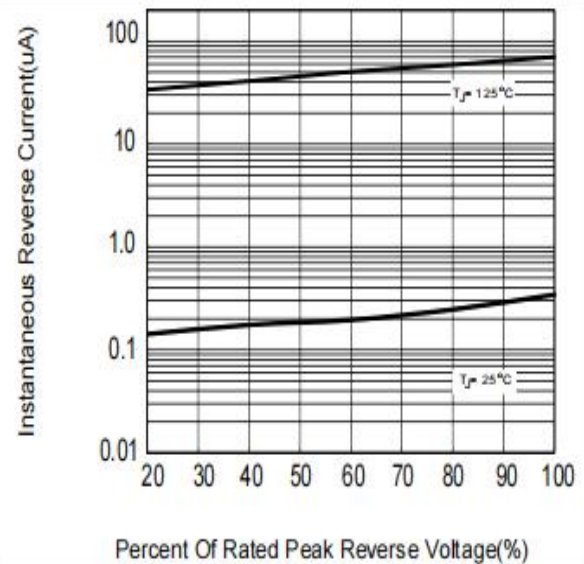


Fig.4 Typical Reverse Characteristics

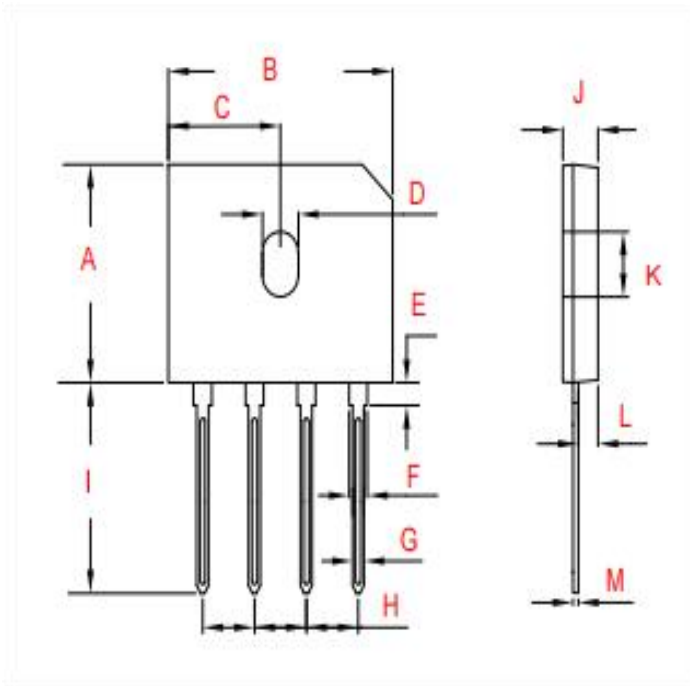




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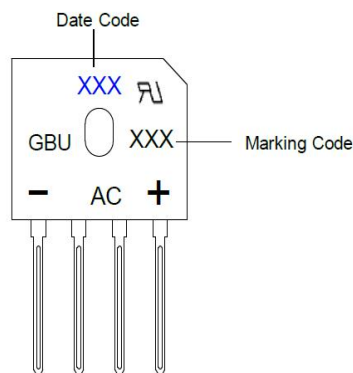
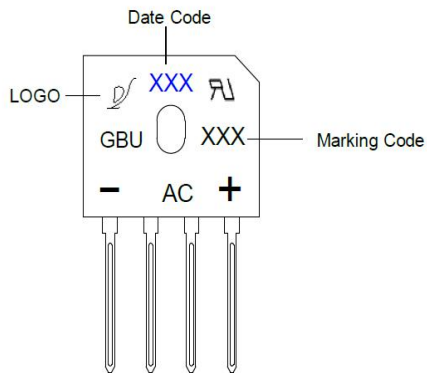
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5. Dimensions



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.720	0.752	18.30	19.10
B	0.858	0.874	21.80	22.20
C	0.429	0.437	10.90	11.10
D	0.146	0.154	3.70	3.90
E	0.083	0.106	2.10	2.70
F	0.075	0.091	1.90	2.30
G	0.035	0.051	0.90	1.30
H	0.189	0.209	4.80	5.30
I	0.681	0.720	17.30	18.30
J	0.130	0.142	3.30	3.60
K	0.217	0.232	5.50	5.90
L	0.071	0.087	1.80	2.20
M	0.018	0.022	0.46	0.56

6. Part Marking System



7. Package Information

Package	Minimum Package (pcs)	InnerBox Quantity(pcs)	OuterCarton Quantity(pcs)	Delivery Mode
GBU	20	1000	2000	Tube



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