

GBU20005 THRU GBU2010



SINGLE PHASE 20 AMP BRIDGE RECTIFIERS

Features

- I_o 20A
- V_{RRM} 50V~1000V
- Glass passivated chip
- High surge forward current capability

Applications

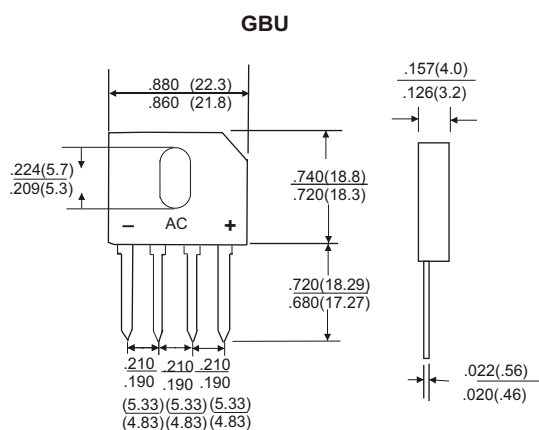
- General purpose 1 phase Bridge rectifier applications
- Lead Free Finish/RoHS Compliant

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

20.0 Ampere



Dimensions in inches and (millimeters)

Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	GBU20						
				005	01	02	04	06	08	10
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Average Rectified Output Current	I_o	A	60Hz sine wave, R-load	With heatsink $T_c = 87^\circ\text{C}$						
				Without heatsink $T_a = 25^\circ\text{C}$						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, $T_j = 25^\circ\text{C}$	240						
Current Squared Time	I^2t	A^2S	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j = 25^\circ\text{C}$, Rating of per diode	240						
Storage Temperature	T_{stg}	$^\circ\text{C}$		-55 ~+150						
Junction Temperature	T_j	$^\circ\text{C}$		-55 ~+150						
Dielectric Strength	V_{dis}	KV	Terminals to case, AC 1 minute	2.5						
Mounting Torque	T_{or}	$\text{kg} \cdot \text{cm}$	Recommend torque: 5kg · cm	8						

Electrical Characteristics ($T_a = 25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	$I_{FM} = 10\text{A}$, Pulse measurement, Rating of per diode	1.1
Peak Reverse Current	I_{RRM}	μA	$V_{RM} = V_{RRM}$, Pulse measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	Between junction and ambient, Without heatsink	22
	$R_{\theta J-C}$		Between junction and case, With heatsink	1.5

Characteristics(Typical) GBU20005 THRU GBU2010

FIG1:Io-Tc Curve

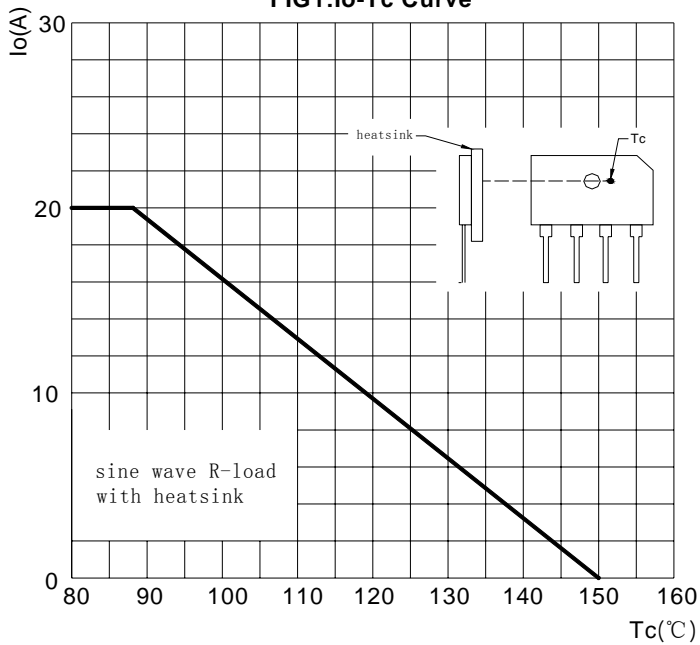


FIG2:Surge Forward Current Capadility

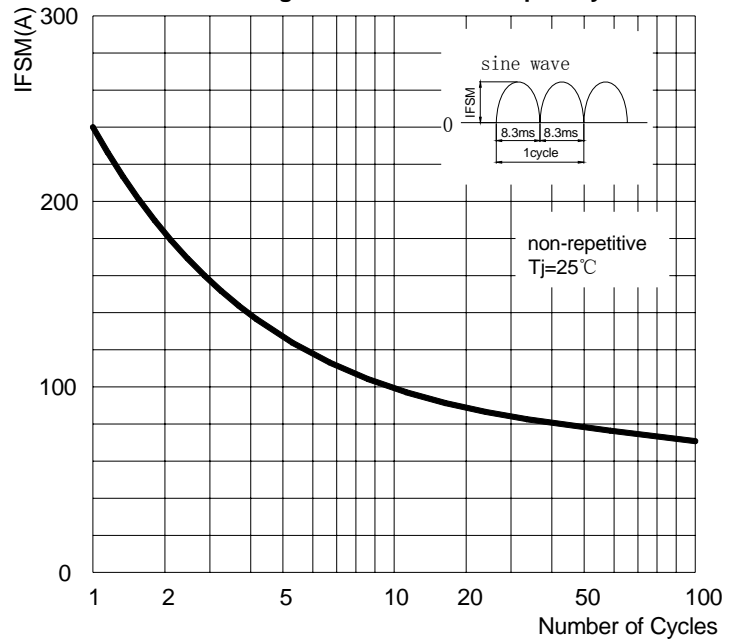


FIG3: Forward Voltage

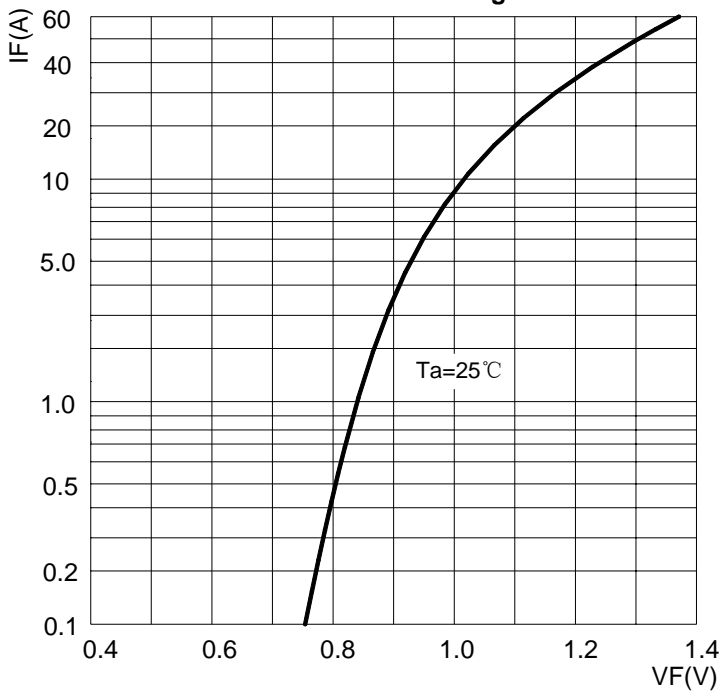


FIG4:Typical Reverse Characteristics

