

GBU Plastic-Encapsulate Bridge Rectifier

GBU25005 THRU GBU2510

General Purpose Bridge Rectifier

Features

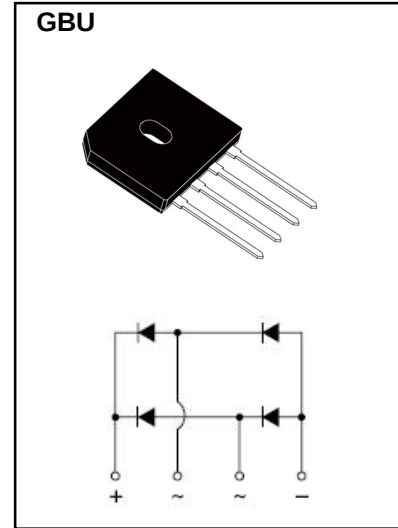
- I_O 25A
- V_{RRM} 50V-1000V
- High surge current capability
- Glass passivated chip

Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- GBU25XX
- XX : From 005 To 10



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	GBU25						
				005	01	02	04	06	08	10
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V		35	70	140	280	420	560	700
Average Rectified Output Current	I_O	A	60Hz sine wave, R-load $T_c = 100^\circ\text{C}$	25						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz half-sine wave, 1 cycle, $T_j = 25^\circ\text{C}$	350						
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	508						
Storage Temperature	T_{stg}	$^\circ\text{C}$		$-55 \sim +150$						
Junction Temperature	T_j	$^\circ\text{C}$		$-55 \sim +150$						
Dielectric Strength	V_{dis}	KV	Terminals to case, AC 1 minute	2.5						
Mounting Torque	Tor	$\text{kg} \cdot \text{cm}$	Recommend torque: $5\text{kg} \cdot \text{cm}$	8						

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

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	$I_{FM} = 12.5\text{A}$, Pulse measurement, Rating of per diode	1.0
Peak Reverse Current	I_{RRM}	μA	$V_{RM} = V_{RRM}$, Pulse measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C}/\text{W}$	Between junction and ambient, Without heatsink	22
	$R_{\theta J-C}$		Between junction and case, With heatsink	1.0

Typical Characteristics

FIG.1-MAXIMUM FORWARD SURGE CURRENT

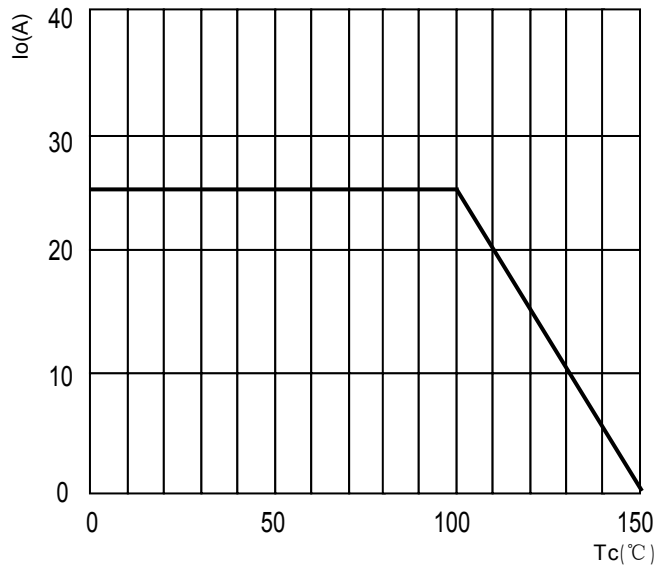


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

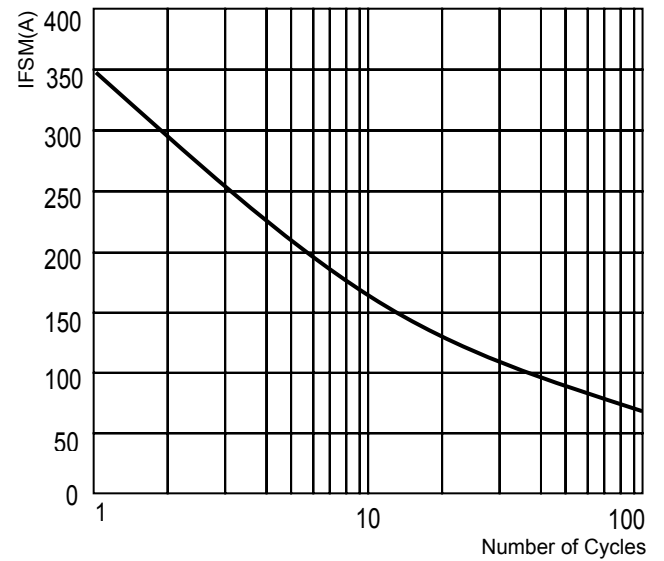


FIG.3-TYPICAL FORWARD CHARACTERISTICS

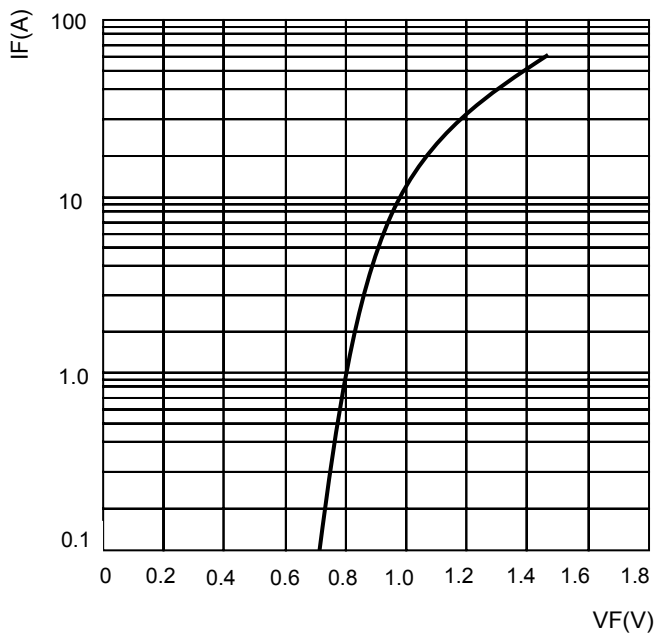
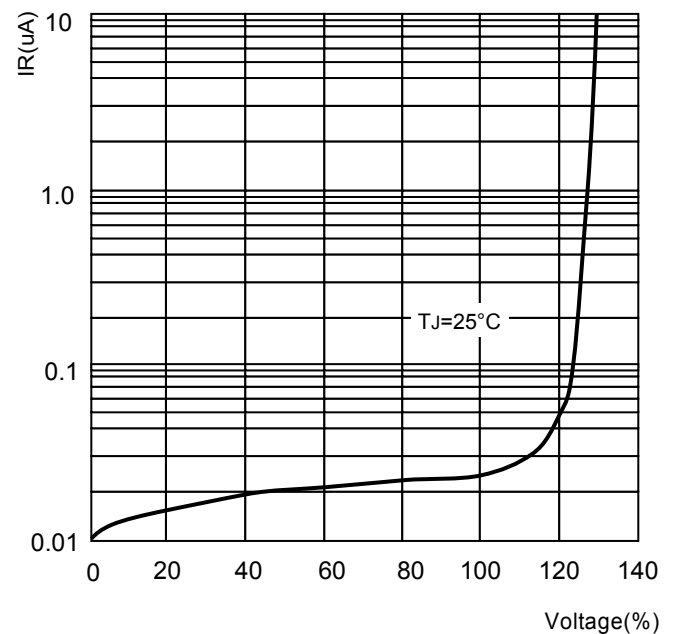
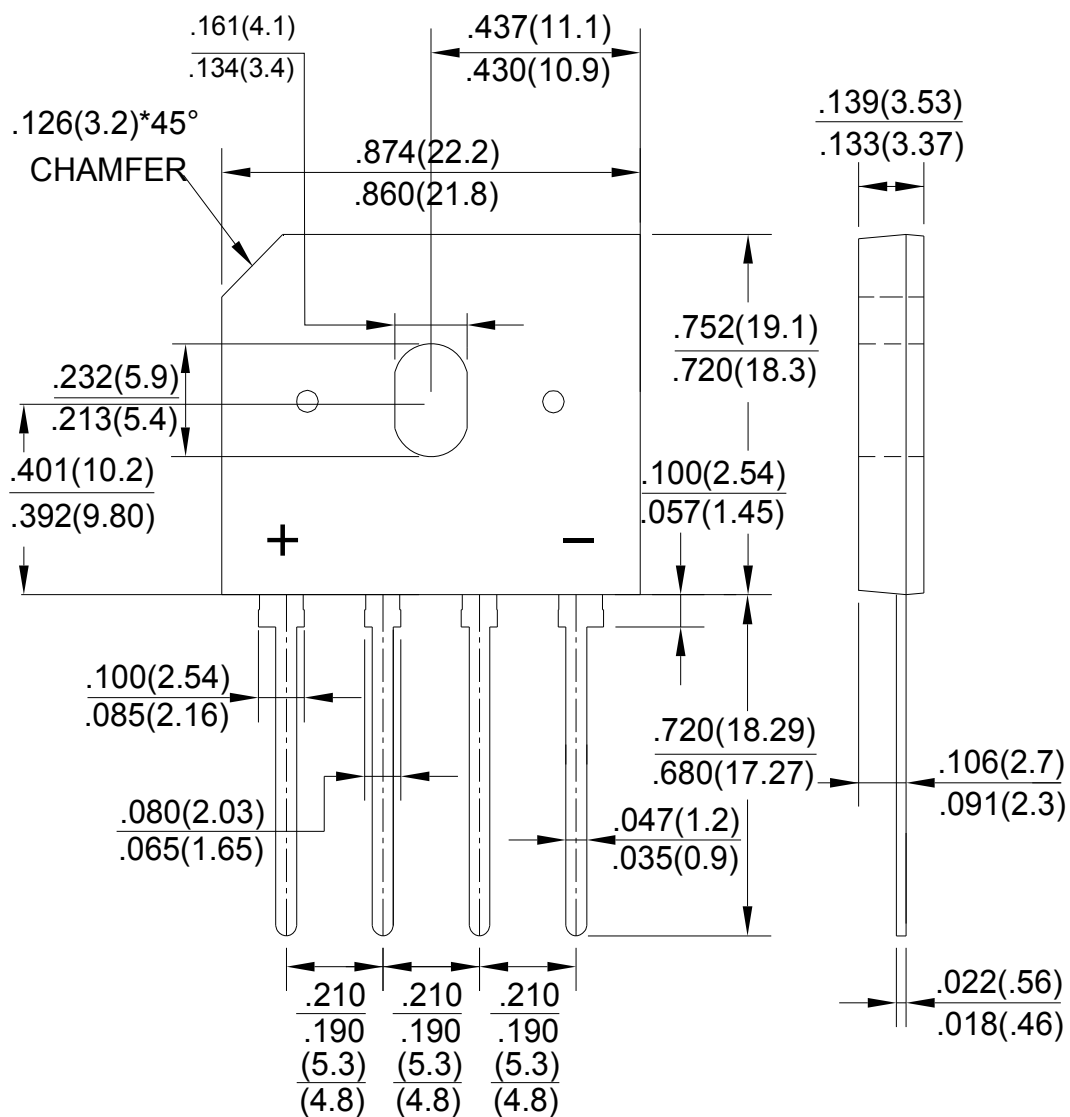


FIG.4-TYPICAL REVERSE CHARACTERISTICS



GBU Package Outline Dimensions



Unit: in inches (millimeters)

NOTICE

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ does not assume any liability arising out of the application or use of any product described herein.