

GBU Plastic-Encapsulate Bridge Rectifier

Features

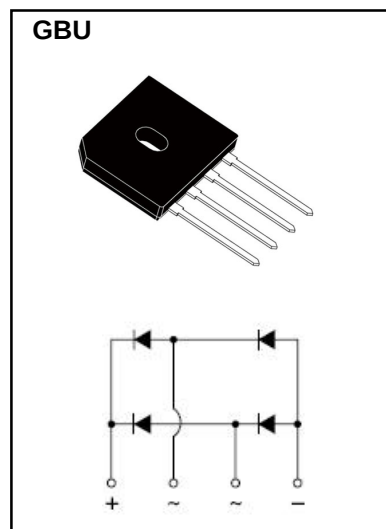
- I_O 20A
- V_{RRM} 50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- GBU20XX
- XX : From 005 To 10



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 $T_c = 98^\circ\text{C}$						
				Without heatsink $T_a = 25^\circ\text{C}$						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, $T_j = 25^\circ\text{C}$	260						
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	280						
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	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	$I_{FM} = 10.0\text{A}$, 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	1.0

Typical Characteristics

FIG.1-MAXIMUM FORWARD SURGE CURRENT

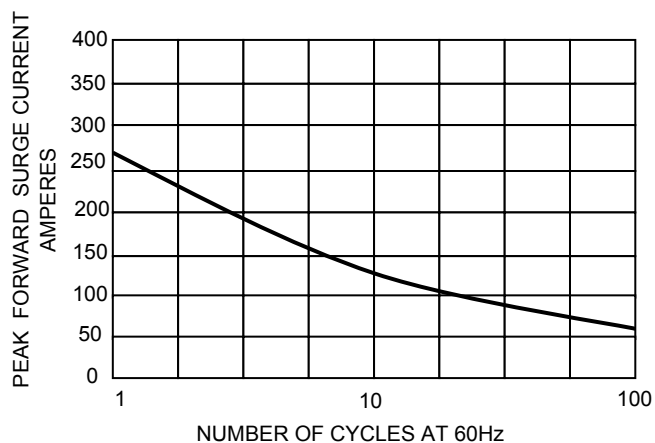


FIG.2- DERATING CURVE
OUTPUT RECTIFIED CURRENT

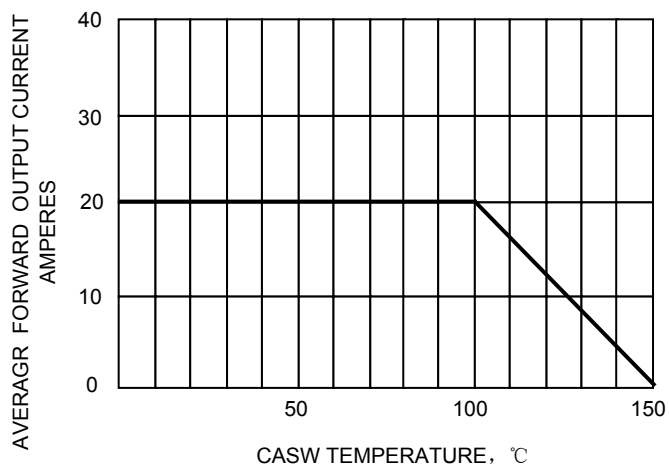


FIG.3-TYPICAL FORWARD
CHARACTERISTICS

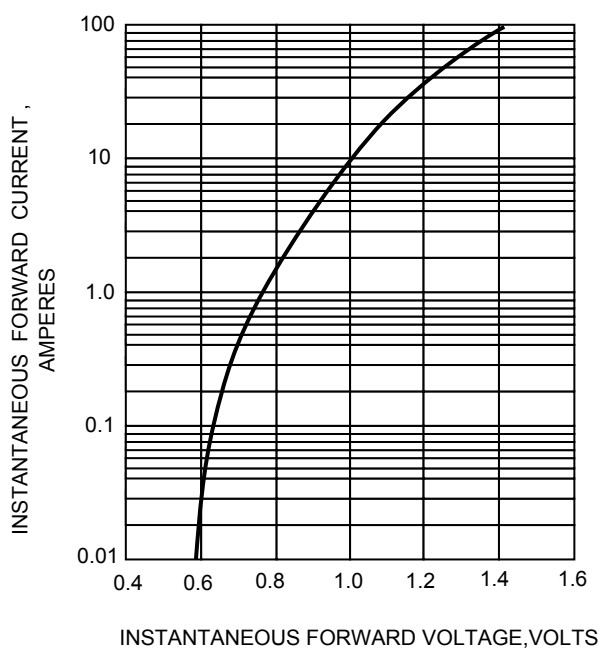


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

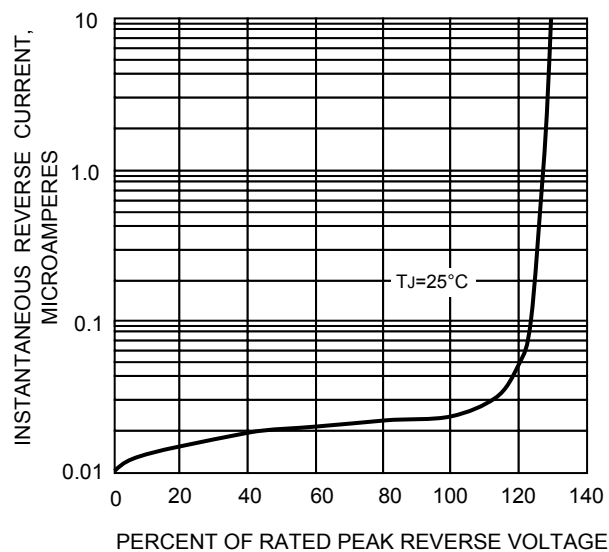
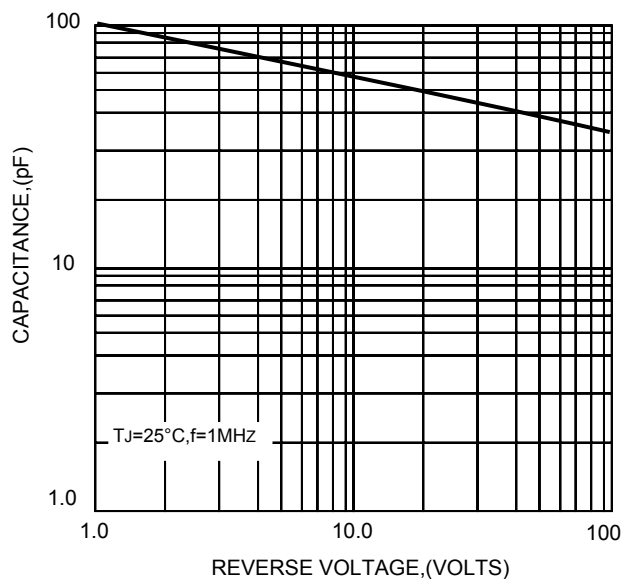
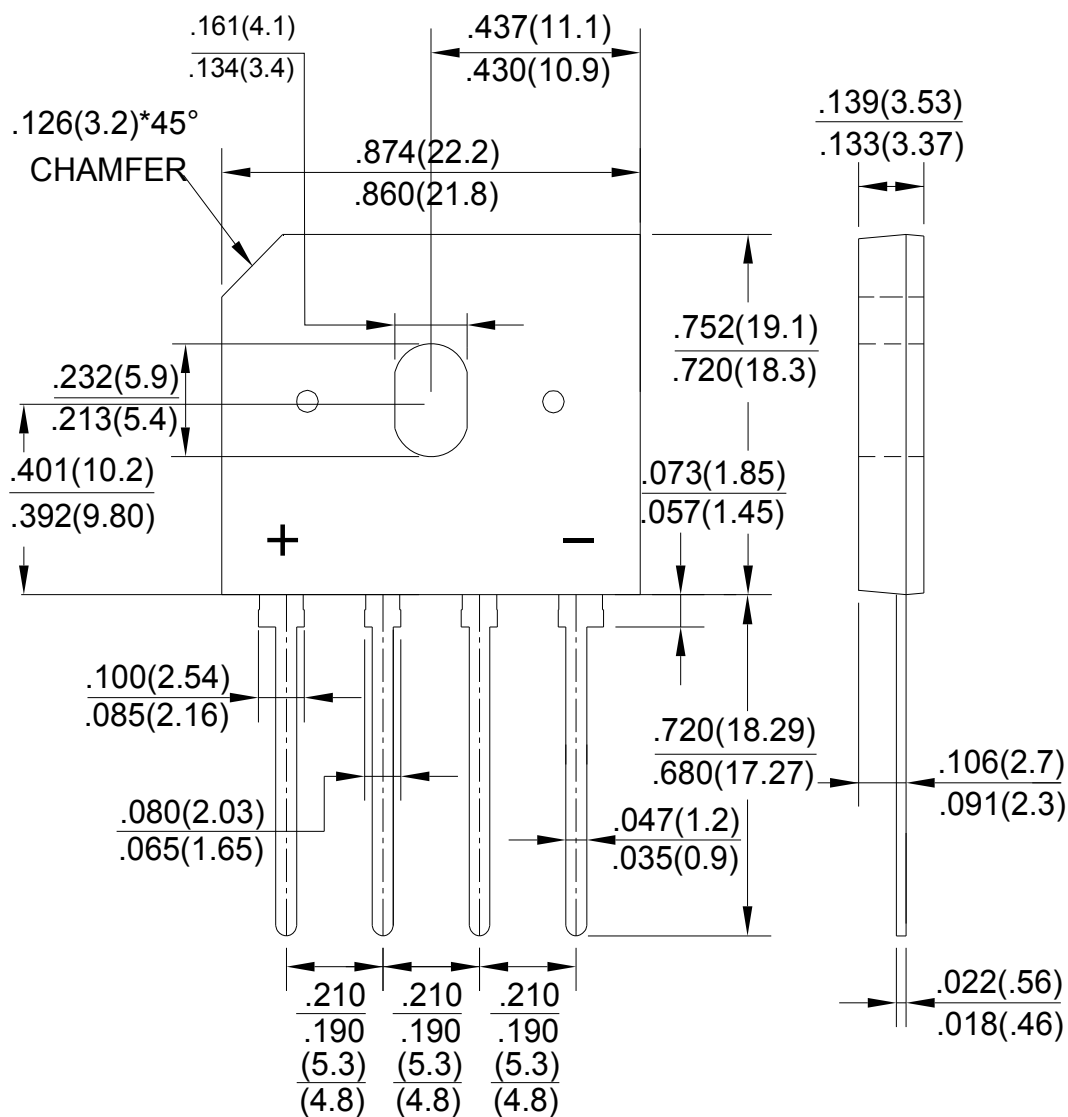


FIG.5-TYPICAL JUNCTION CAPACITANCE



GBU Package Outline Dimensions



Unit: in inches (millimeters)

NOTICE

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