

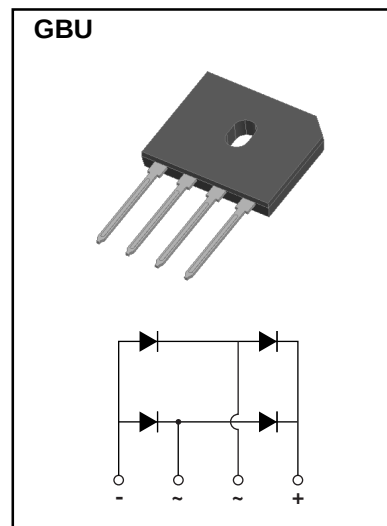
GBU Plastic-Encapsulate Bridge Rectifier

Features

- I_O 10A
- VRRM 50V-1000V
- High surge current capability
- Ultra low leakage reverse current
- Ideal for printed circuit boards

Mechical Data

- Case: GBU molded plastic
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Leads solderable per MIL-STD-750
- Mounting position: Any



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions		GBU10						
					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
Maximum DC blocking Voltage	V _{DC}	V			50	100	200	400	600	800	1000
Average Rectified Output Current	I _O	A	60Hz sine wave, R-load	With heatsink T _c =100°C	10						
				Without heatsink T _c =100°C	3						
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60Hz sine wave, 1 cycle, T _j =25°C		220						
Current Squared Time	I ² t	A ² S	1ms≤t<8.3ms T _j =25°C , Rating of per diode		200.86						
Storage Temperature	T _{stg}	°C			-55 ~+150						
Junction Temperature	T _j	°C			-55 ~+150						

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

Item	Symbol	Unit	Test Condition		Max
Peak Forward Voltage	V_{FM}	V	$I_{FM} = 5A$, Pulse measurement, Rating of per diode		1.1
Peak Reverse Current	I_{RRM1}	μA	$V_{RM} = V_{RRM}$	$T_a = 25^\circ C$	10
	I_{RRM2}			$T_a = 125^\circ C$	500
Thermal Resistance	$R_{\theta J-A}$	°C/W	Between junction and ambient, Without heatsink		35
	$R_{\theta J-C}$		Between junction and case, With heatsink		4
Juction Capacitance (Typical)	CJ	pF	Measured at 1.0MHz and applied reverse voltage of 4.0 volts.		70

Typical Characteristics

FIG.1-FORWARD CURRENT DERATING CURVE

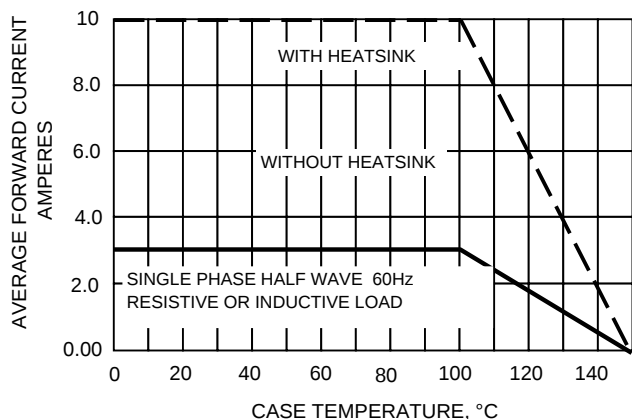


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

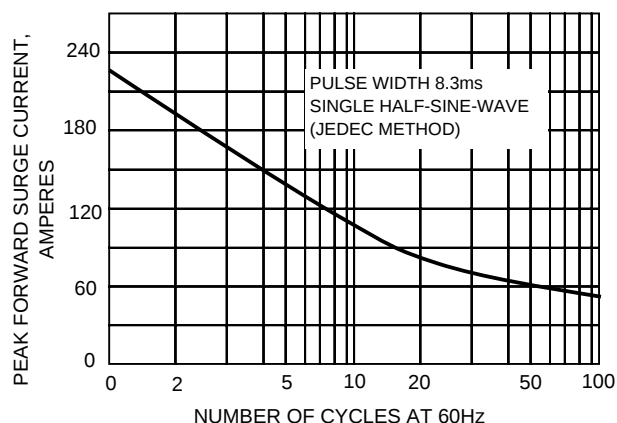


FIG.3-TYPICAL JUNCTION CAPACITANCE

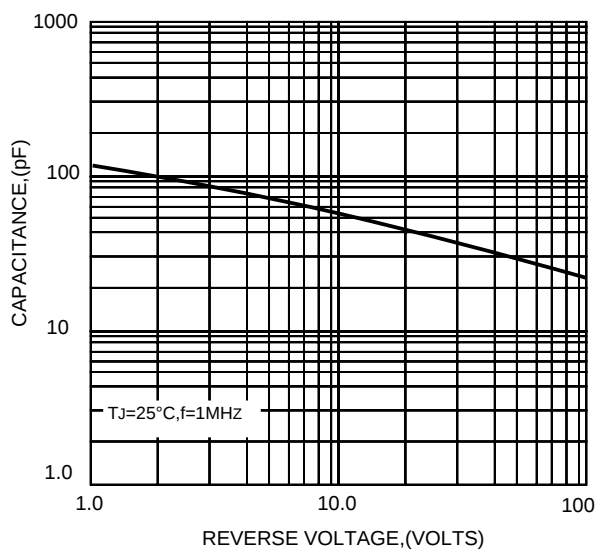


FIG.4-TYPICAL FORWARD CHARACTERISTICS

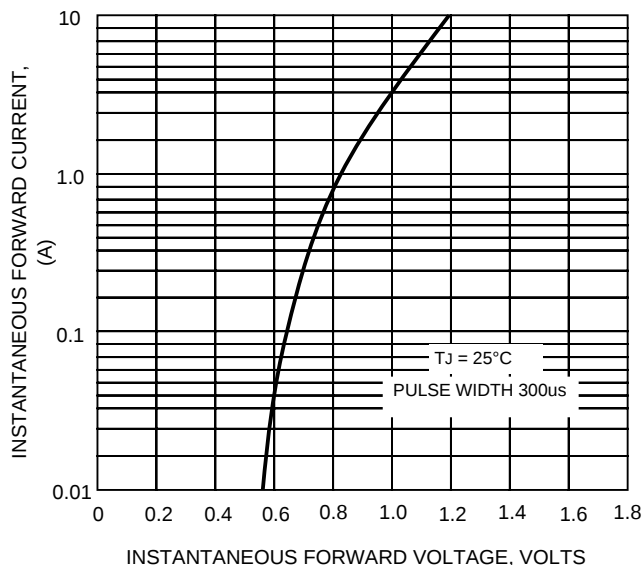
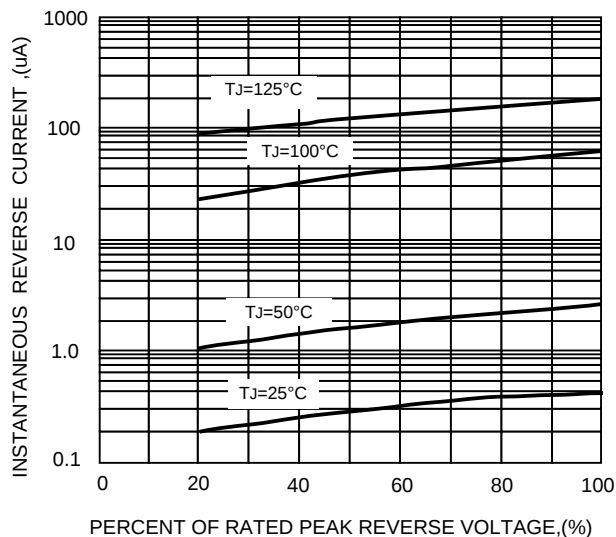
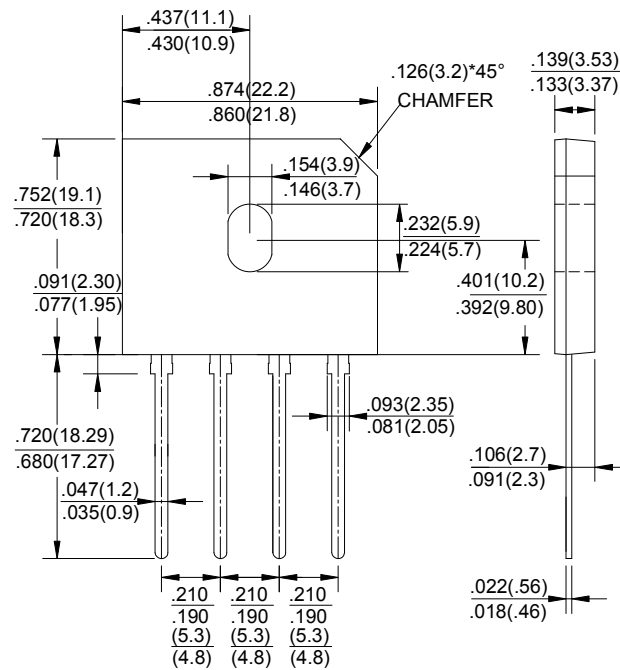


FIG.5-TYPICAL REVERSE CHARACTERISTICS



GBU Package Outline Dimensions



Dimensions in inches and (millimeters)

Ordering Information

Part Number	Package	Shipping Quantity
GBU10005-GBU1010	GBU	0.25K

Marking Diagram

