

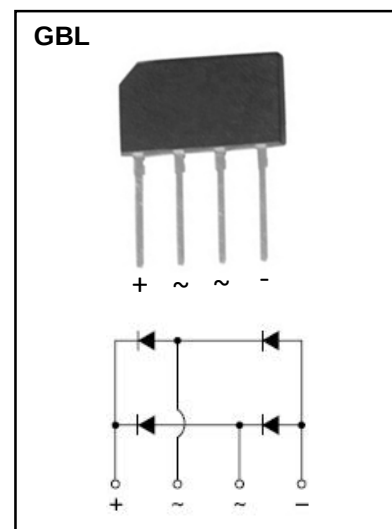
GBL Plastic-Encapsulate Bridge Rectifier

Features

- I_O 6A
- VRRM 50V-1000V
- High surge current capability
- Ultra low leakage reverse current
- Ideal for printed circuit boards

Mechical Data

- Case: GBL molded plastic
- Molding compound: UL flammability classification rating 94V-0
- Mounting position: Any



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	GBL6						
				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, $T_c=100^{\circ}C$	6						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half sine wave, 1 cycle, $T_j=25^{\circ}C$	150						
Current Squared Time	I^2t	A^2S	$1ms \leq t < 8.3ms$ $T_j=25^{\circ}C$, Rating of per diode	93.375						
Storage Temperature	T_{stg}	$^{\circ}C$		-55 ~+150						
Junction Temperature	T_j	$^{\circ}C$		-55 ~+150						

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

Item	Symbol	Unit	Test Condition		Max
Peak Forward Voltage	V_{FM}	V	$I_{FM}=3.0A$, 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	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient, Without heatsink		47
	$R_{\theta J-C}$		Between junction and case, With heatsink		10

Typical Characteristics

FIG.1-FORWARD CURRENT DERATING CURVE

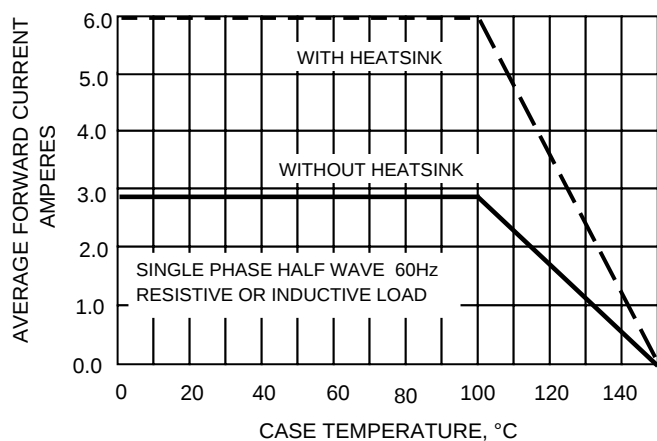


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

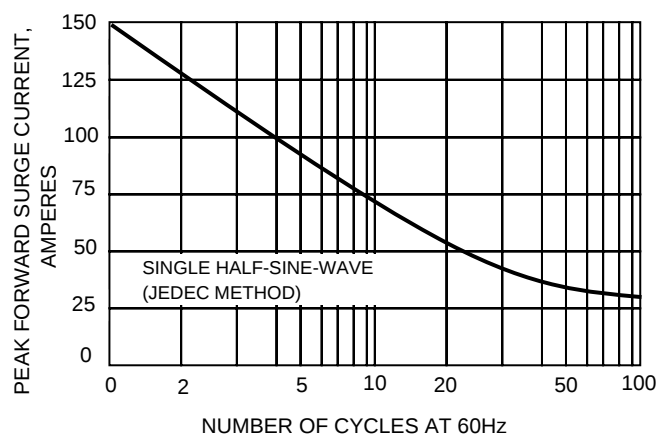


FIG.3-TYPICAL REVERSE CHARACTERISTICS

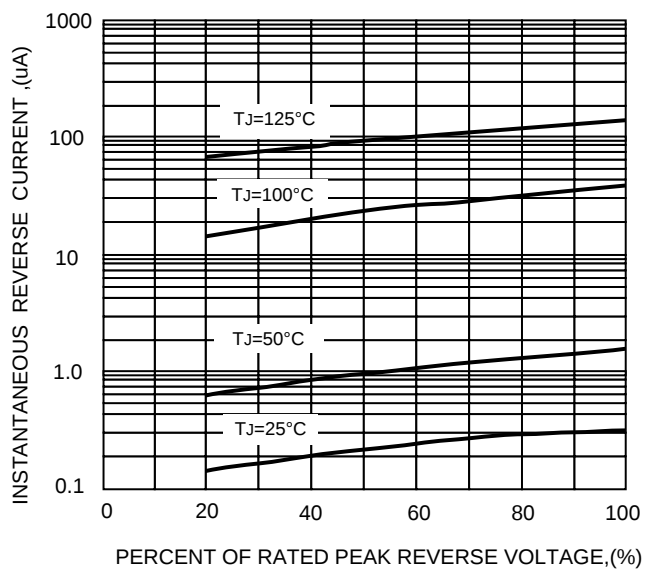
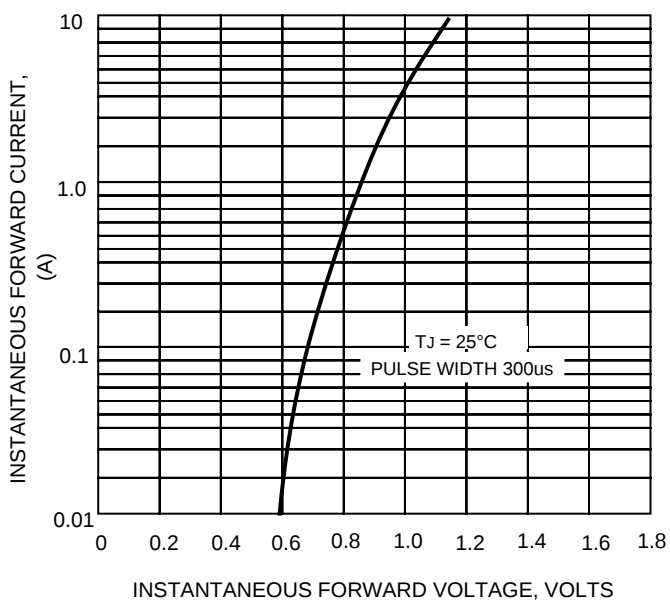
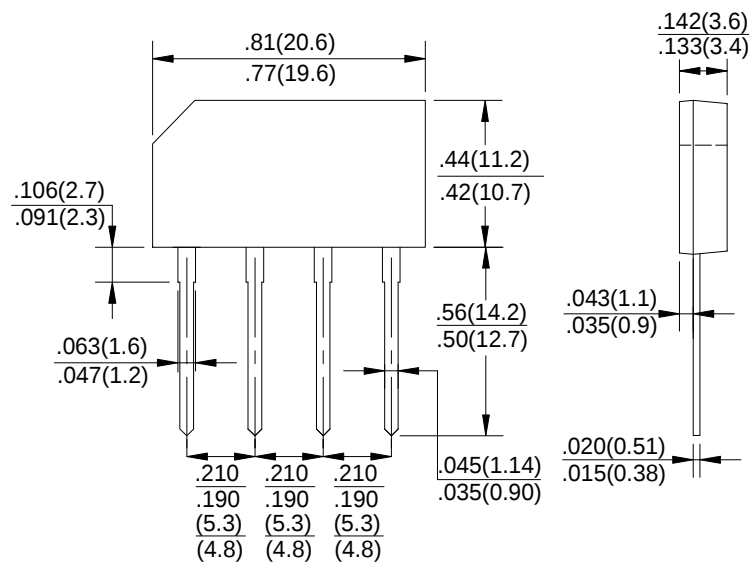


FIG.4-TYPICAL FORWARD CHARACTERISTICS



GBL Package Outline Dimensions



Dimensions in inches and (millimeters)

Ordering Information

Part Number	Package	Shipping Quantity
GBL6005 -GBL610	GBL	0.5K/Box

Marking Diagram

