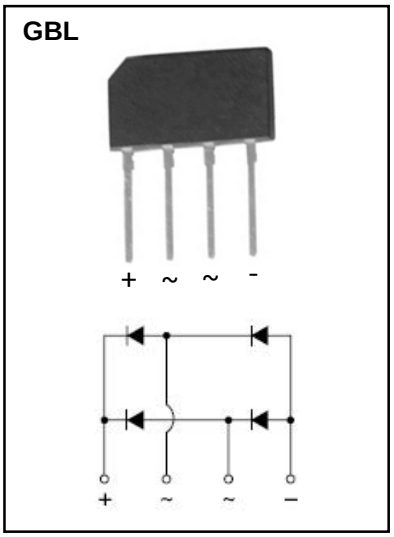
GBL4005 THRU GBL410

RoHS COMPLIANT

GBL Plastic-Encapsulate Bridge Rectifier

Features

- I_O 4A
- 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	GBL4						
				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, Ta=50℃	4						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half sine wave, 1 cycle, T_j=25℃	125						
Current Squared Time	I^2t	A^2S	1ms≤t<8.3ms Tj=25℃，Rating of per diode	64.8						
Storage Temperature	T_{stg}	℃		-55 ~+150						
Junction Temperature	T_j	℃		-55 ~+150						

Electrical Characteristics（T_a=25℃ Unless otherwise specified）

Item	Symbol	Unit	Test Condition		Max
Peak Forward Voltage	V_{FM}	V	I_{FM}=4.0A, Pulse measurement, Rating of per diode		1.1
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	T_a=25℃	10
	I_{RRM2}			T_a=125℃	500
Thermal Resistance	$R_{\theta J-A}$	℃/W	Between junction and ambient, Without heatsink		47
	$R_{\theta J-C}$		Between junction and case, With heatsink		10

Typical Characteristics

FIG.1-MAXIMUM NON-REPETITIVE SURGE CURRENT

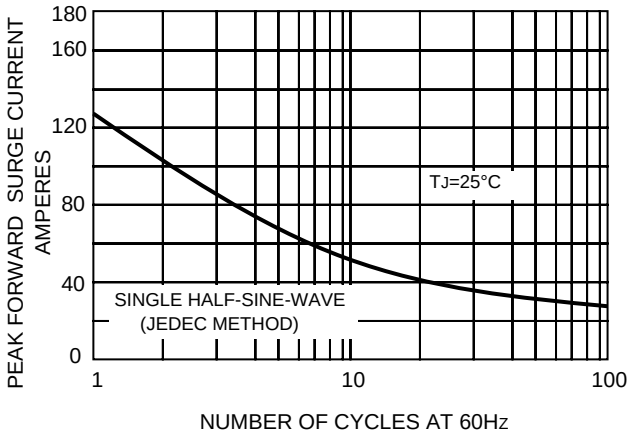


FIG.2-FORWARD DERATING CURRENT

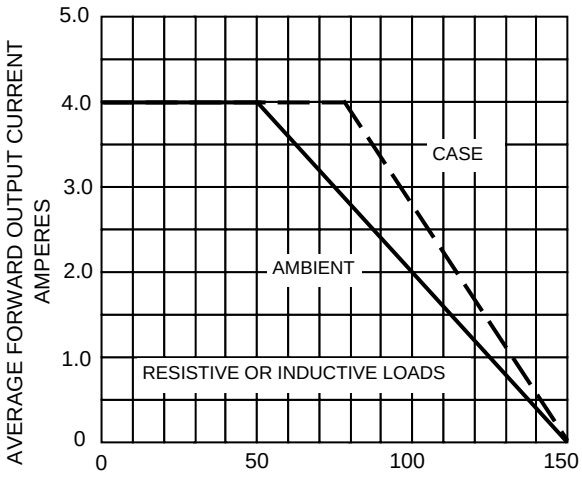


FIG.3-TYPICAL FORWARD CHARACTERISTICS

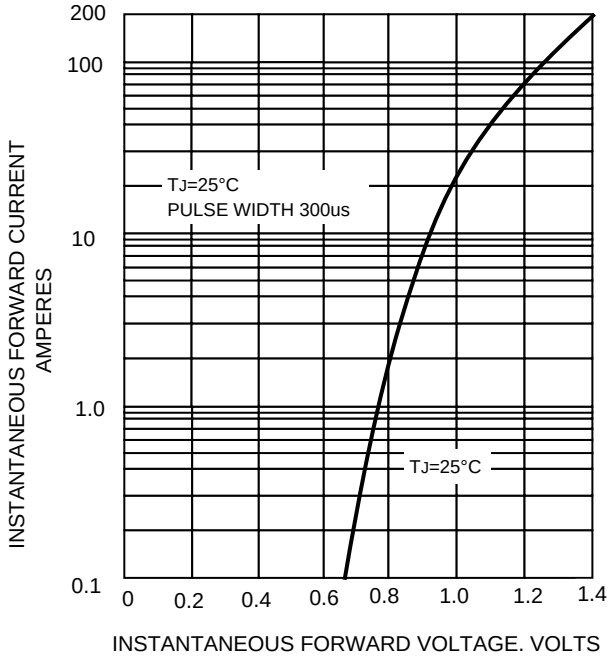
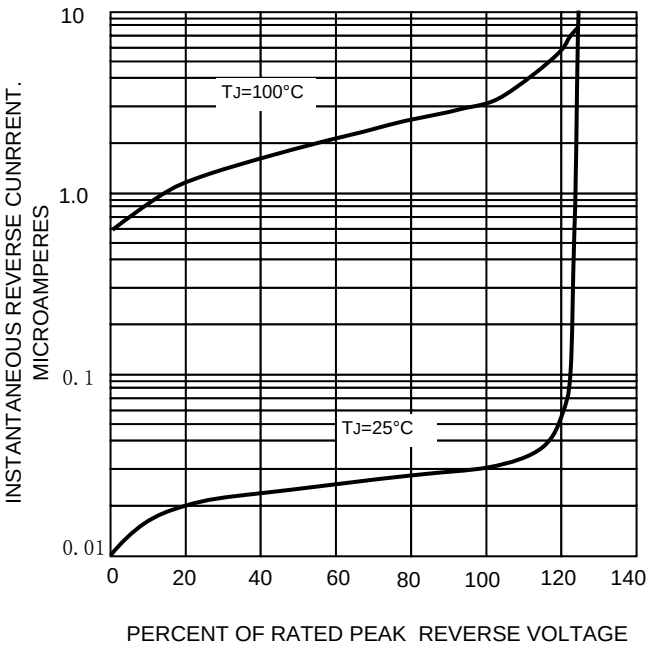
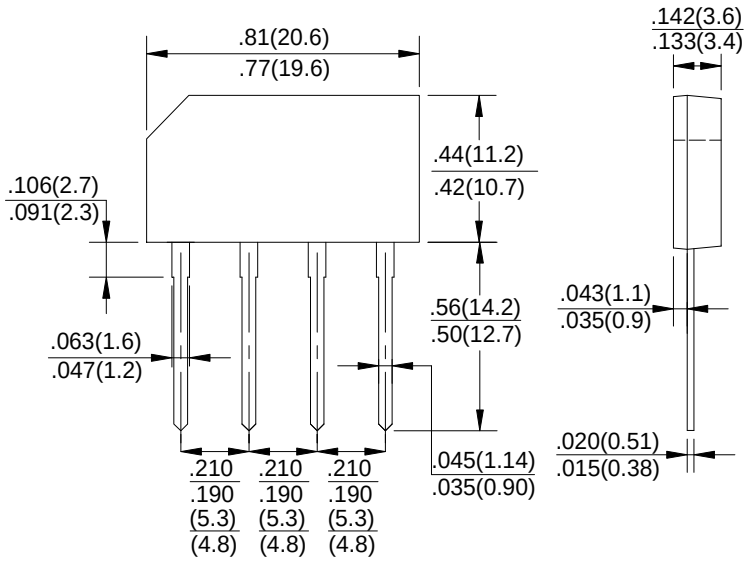


FIG.4-TYPICAL REVERSE CHARACTERISTICS



GBL Package Outline Dimensions

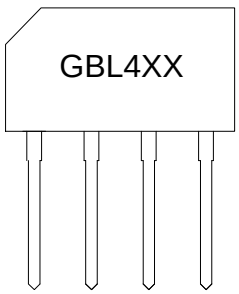


Dimensions in inches and (milimeters)

Ordering Information

Part Number	Package	Shipping Quantity
GBL4005 -GBL410	GBL	0.5K/Box

Marking Diagram



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