

# GBU4A THRU GBU4M

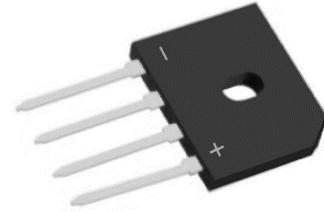
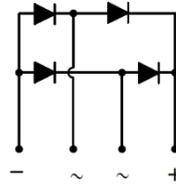
## Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 4 A

### Features

- Polarity: As marked on body
- Surge overload rating -150 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L The flammability classification 94V-0
- Mounting position: Any
- Weight: 0.138 ounces , 3.9 grams



GBU Plastic Package

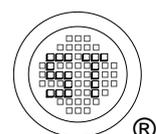
### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	GBU4A	GBU4B	GBU4D	GBU4G	GBU4J	GBU4K	GBU4M	Unit
	Marking	GBU4A	GBU4B	GBU4D	GBU4G	GBU4J	GBU4K	GBU4M	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink) <sup>2)</sup>	$I_{F(AV)}$	4							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	150							A
Maximum Forward Voltage at 2 A DC	$V_F$	1							V
Maximum Reverse Current at Rated DC Blocking Voltage	$I_R$	5 500							$\mu A$
Typical junction capacitance <sup>1)</sup>	$C_J$	39							pF
Rating for Fusing (t < 8.3 ms)	$I^2t$	93							A <sup>2</sup> s
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JC}$	4.0							°C/W
Operating and Storage Temperature Range	$T_j, T_{stg}$	- 55 to + 150							°C

<sup>1)</sup> Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

<sup>2)</sup> Device mounted on 150mm\*150mm\*1.6mm Cu Plate Heatsink.



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## Electrical Characteristics Curves

FIG.1-FORWARD CURRENT DERATING CURVE

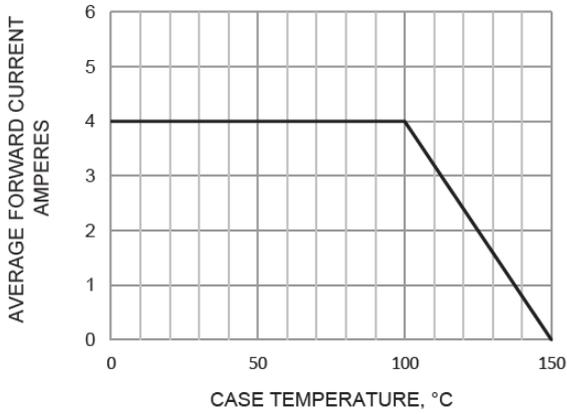


FIG.2-MAXIMUM FORWARD SURGE CURRENT

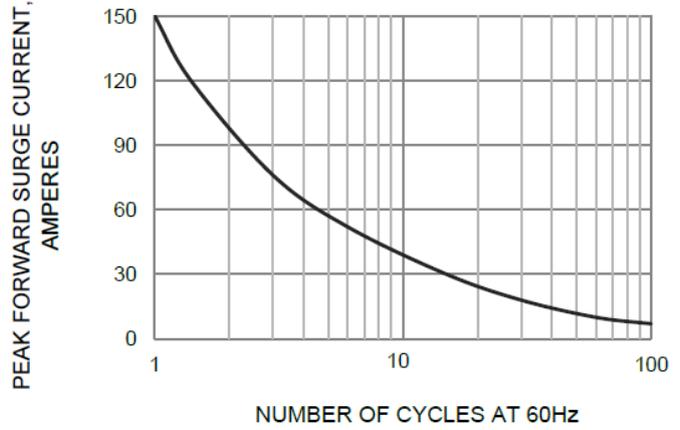


FIG.3-TYPICAL JUNCTION CAPACITANCE

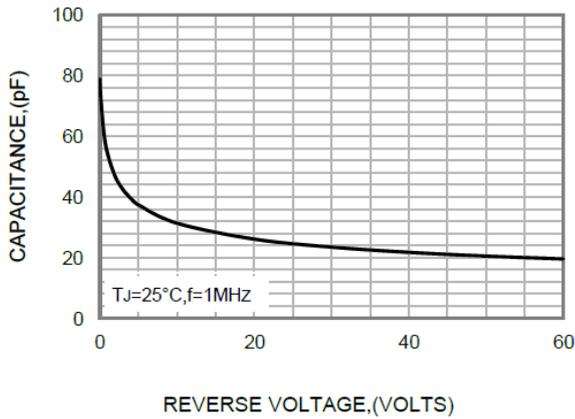


FIG.4-TYPICAL FORWARD CHARACTERISTICS

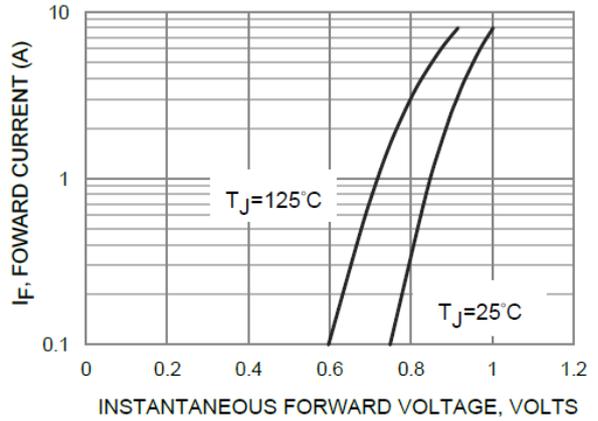
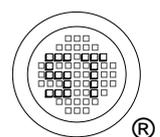
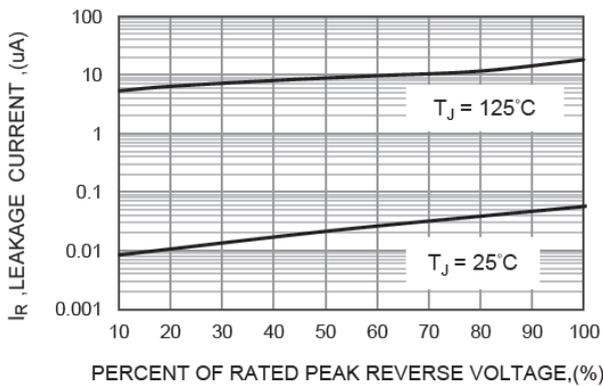


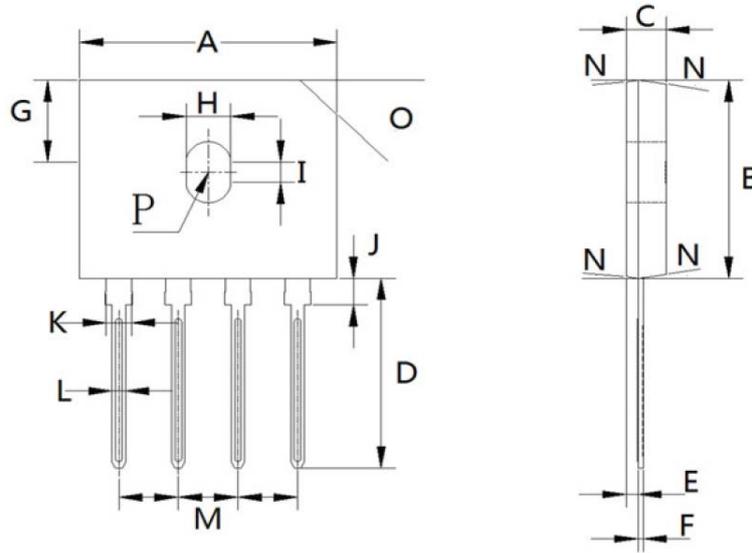
FIG.5-TYPICAL REVERSE CHARACTERISTICS



# GBU4A THRU GBU4M

Package Outline Dimensions in inches (millimeters)

GBU



GBU mechanical data

UNIT		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
mm	max	22.30	18.80	3.56	18.00	1.00	0.56	7.90	4.10	2.16	2.75	2.35	1.27	5.33	TYPICAL 7.0°	3.2X45°	1.90 RADIUS
	min	21.80	18.30	3.30	17.50	0.76	0.46	7.40	3.50	1.65	1.85	1.95	1.02	4.83			
mil	max	878	740	140	709	39	22	311	161	85	108	93	50	210		126°45°	75 RADIUS
	min	858	720	130	689	30	18	291	138	65	73	77	40	190			

## Marking information

"XXXXX" = Part No.

"YYWW" = Date Code Marking

" Y " = Year (ex: 19 = 2019)

" W " = Week (ex: 09 = the 9th week of the year)

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