



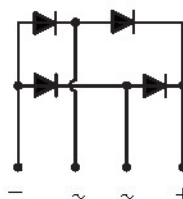
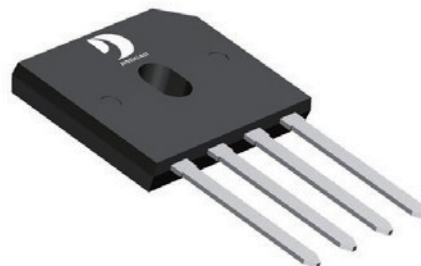
REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 4.0 Amperes

## GLASS PASSIVATED BRIDGE RECTIFIERS

### FEATURES

- Polarity:As marked on body
- Surge overload rating -135 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



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	GBU 4005	GBU 401	GBU 402	GBU 404	GBU 406	GBU 408	GBU 410	UNIT	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current @ T <sub>c</sub> =100°C (without heatsink)	I <sub(av)< sub=""></sub(av)<>	4.0				2.4				A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	135								A
Maximum Forward Voltage at 2.0A DC	V <sub>F</sub>	1.0								V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	5.0				500				uA
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	75								A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note1)	C <sub>J</sub>	35								pF
Typical Thermal Resistance (Note2)	R <sub>θJC</sub>	5.5								°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150								°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150								°C

NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2.Device mounted on 150mm\*150mm\*1.6mm Cu Plate Heatsink.



FIG.1-FORWARD CURRENT DERATING CURVE

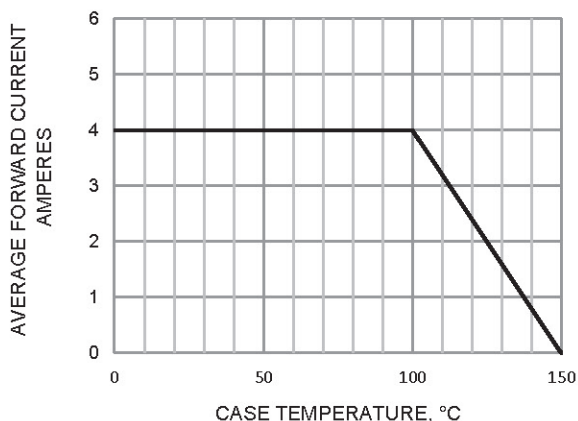


FIG.2-MAXIMUM FOWARD SURGE CURRENT

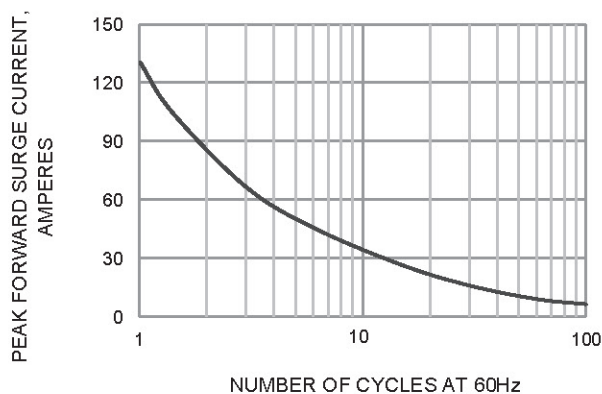


FIG.3-TYPICAL JUNCTION CAPACITANCE

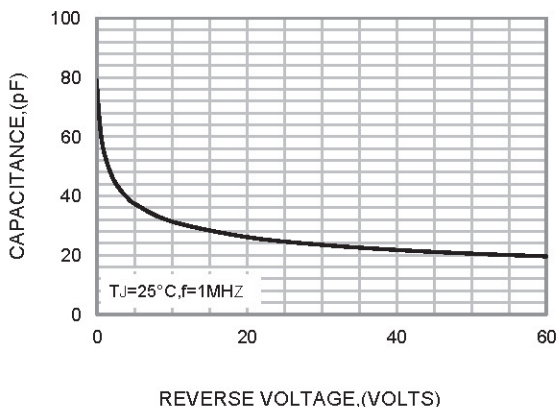


FIG.4-TYPICAL FORWARD CHARACTERISTICS

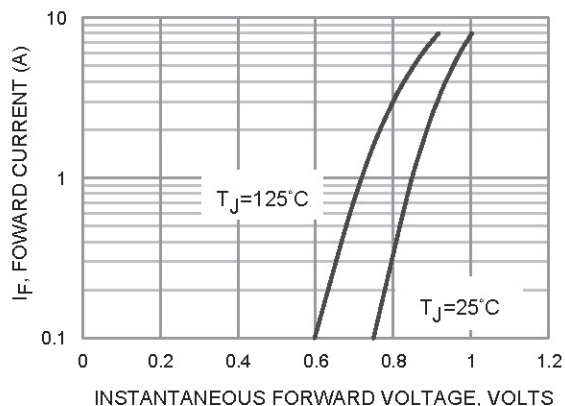
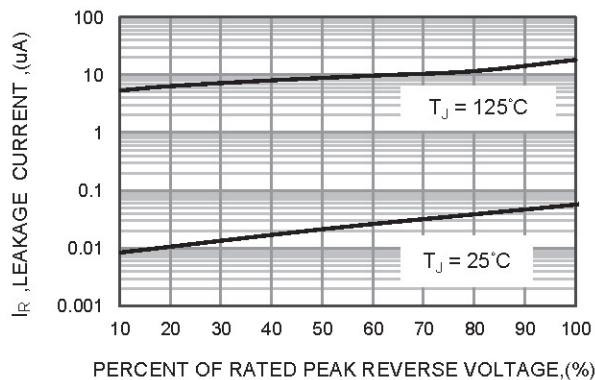
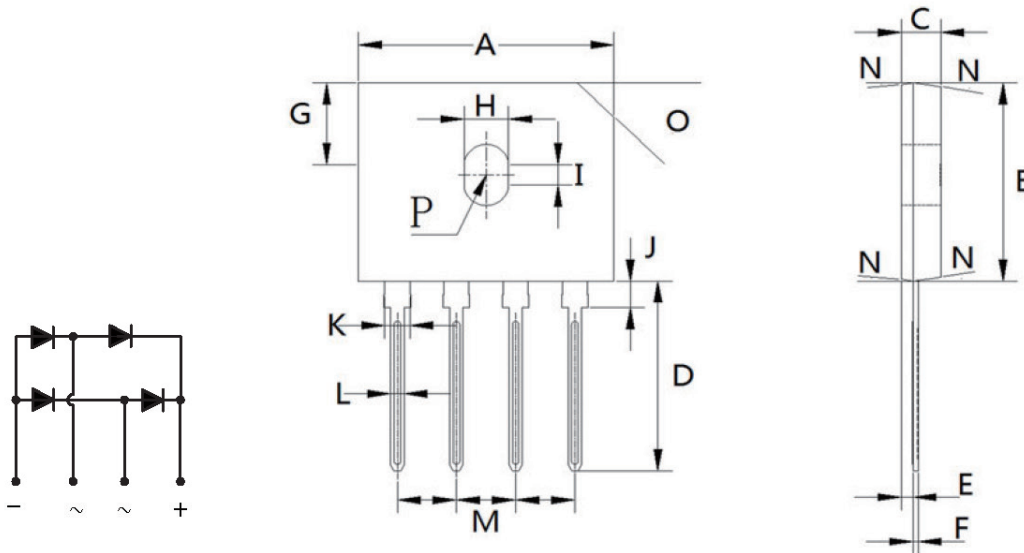


FIG.5-TYPICAL REVERSE CHARACTERISTICS





GBU Package Outline Dimensions



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	7.0° TYPICAL	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			

**Important Notice and Disclaimer**

Jingdao Microelectronics reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

Jingdao Microelectronics makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Jingdao Microelectronics assume any liability for application assistance or customer product design. Jingdao Microelectronics does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Jingdao Microelectronics.

Jingdao Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of Jingdao Microelectronics.