

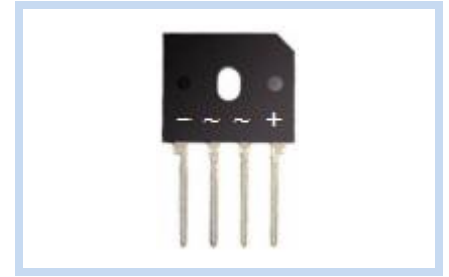
# Single-Phase Bridge Rectifier 4.0A GBU Package

GBU4 Series

MERITEK

## FEATURE

- Operating Temperature: -55 ~ +150°C
- Average Forward Rectified Output Current 4.0A
- Repetitive Reverse Voltage from 50~1000V
- Surge Overload Ratings to 150A
- Flammability Classification 94V-0
- UL Safety Approved: Certification No: E223027



## MAXIMUM RATINGS AND THERMAL CHARACTERISTICS



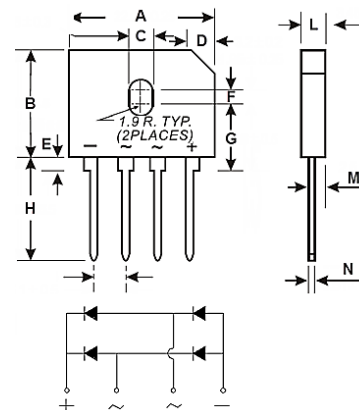
Parameter	Code	GBU 4005	GBU 401	GBU 402	GBU 404	GBU 406	GBU 408	GBU 410	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current	I <sub>F</sub>	4.0, T <sub>A</sub> =100°C with heatsink							A
		2.4, T <sub>A</sub> =100°C without heatsink							
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated load (JEDEC Method)	I <sub>FSM</sub>	150							A
Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	93							A <sup>2</sup> sec
Maximum Instantaneous Forward Voltage Drop per Diode	V <sub>F</sub>	1.1, I <sub>F</sub> =2.0A							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Element	I <sub>R</sub>	5.0, T <sub>A</sub> =25°C							μA
	I <sub>R</sub>	500, T <sub>A</sub> =125°C							μA
Operating Junction and Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	-55~150							°C
Typical Thermal Resistance Per Element	R <sub>θJC</sub>	3.0							°C/W

### Note:

1. Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz. For Capacitive load derate current by 20%.
2. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.
3. Thermal resistance from junction to ambient on P.C. board mounting.

## DIMENSION AND PIN CONFIGURATION

Item	Min. (mm)	Max. (mm)	Item	Min. (mm)	Max. (mm)
A	21.75	22.25	G	10.30	11.30
B	18.20	19.20	H	17.25	18.25
C	3.50	4.10	K	4.60	5.60
D	3.00	3.40	L	3.30	3.60
E	1.45	2.45	M	2.30	2.70
F	1.70	2.20	N	0.46	0.56



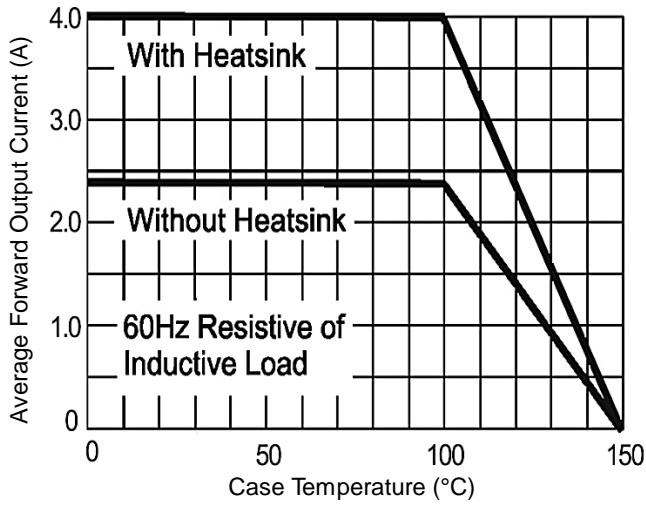
# Single-Phase Bridge Rectifier 4.0A GBU Package

GBU4 Series

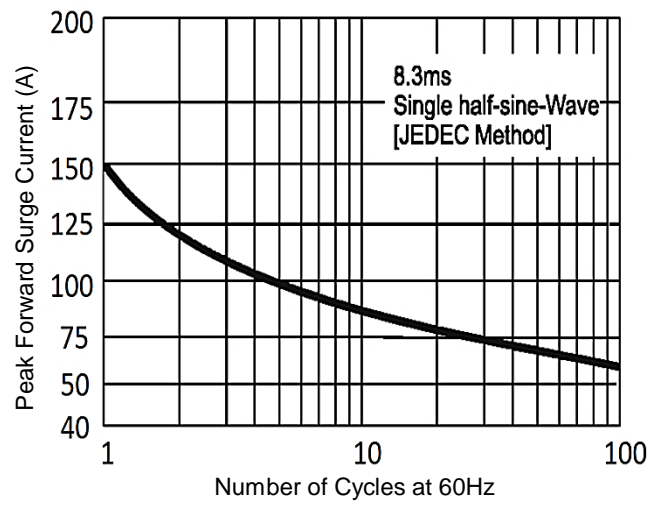
MERITEK

## RATING AND CHARACTERISTIC CURVES

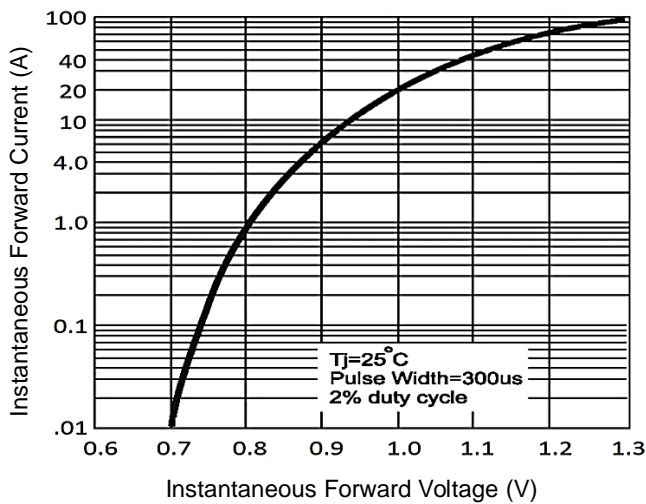
Derating Curve for Output Rectified Current



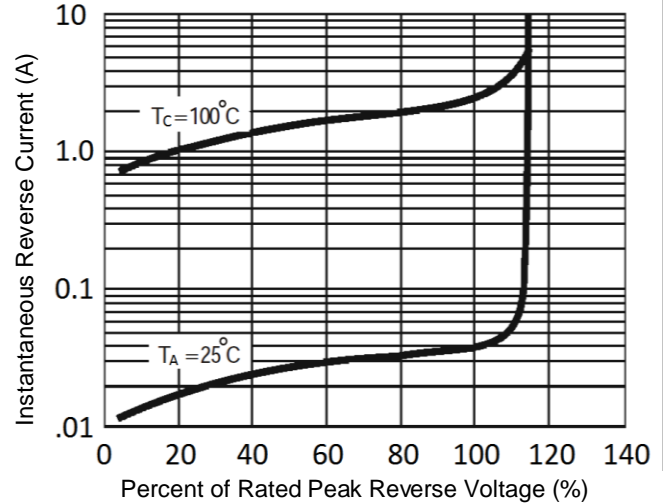
Maximum Non-Repetitive Peak Forward Surge Current



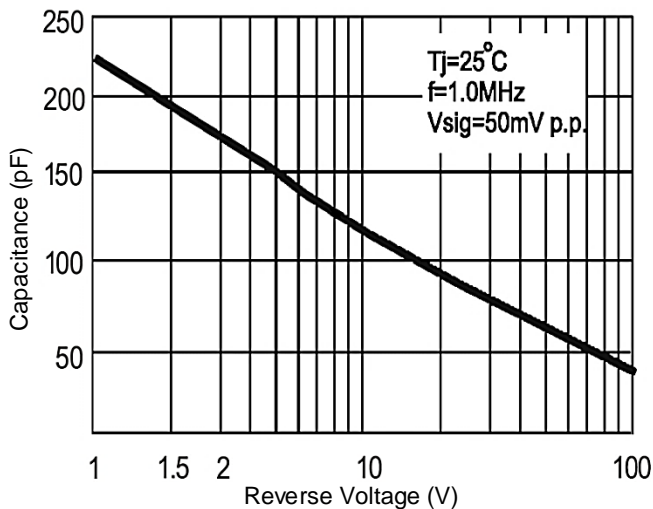
Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



\*Specifications subject to change without notice.