

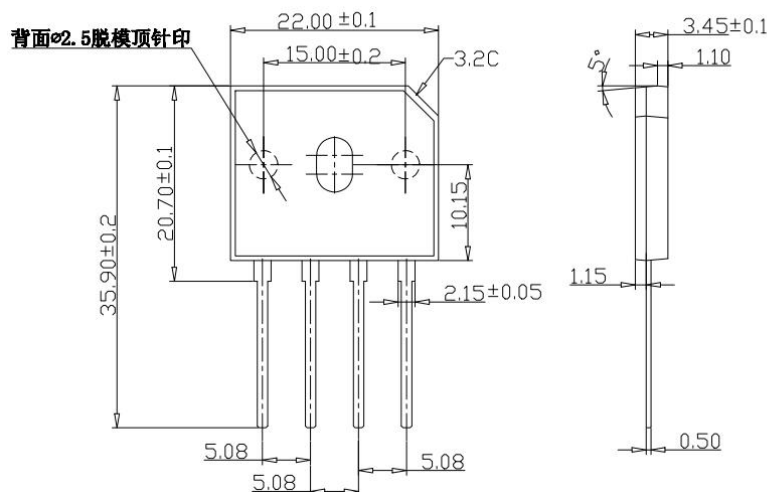
Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: GBU, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version,

GBU



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

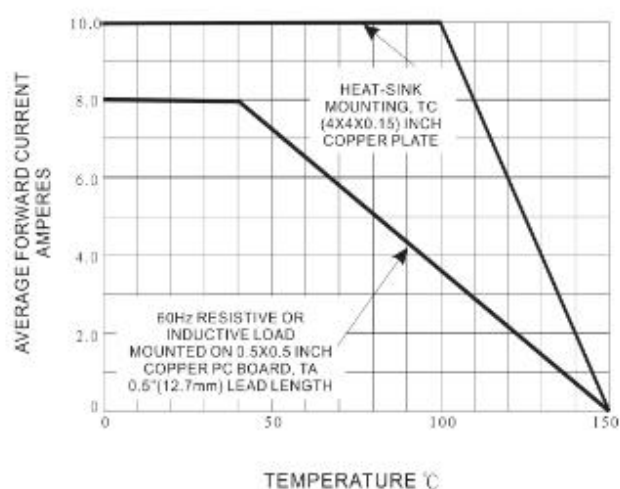
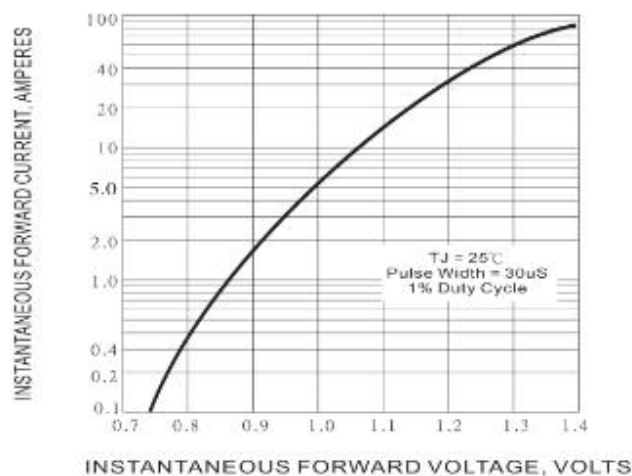
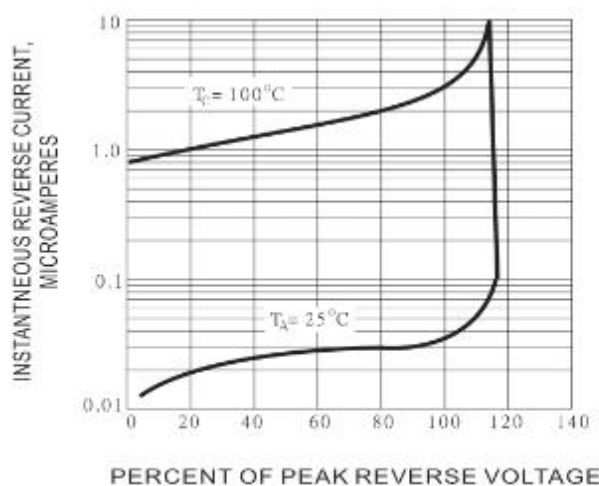
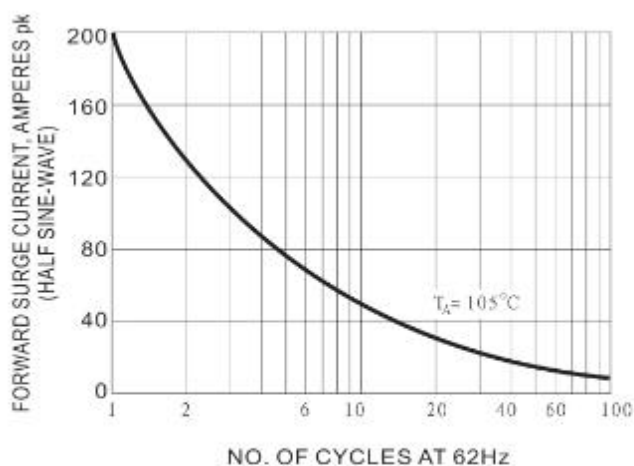
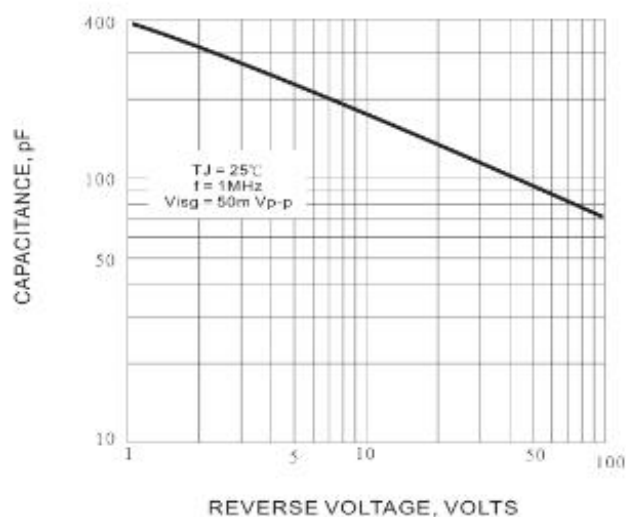
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBU10005	GBU1001	GBU1002	GBU1004	GBU1006	GBU1008	GBU1010	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_{DC}								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum average forward rectified current @ $T_A=40^{\circ}\text{C}$	I_o	10							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200							A
Forward Voltage per element @ $I_F=1.0A$	V_{FM}	1.1							V
Peak Reverse Current @ $T_A=25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^{\circ}\text{C}$	I_R	5.0 500							μA
Typical Junction Capacitance per leg (Note 1)	C_J	255			125				pF
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$	8.6							$^{\circ}\text{C/W}$
	$R_{\theta JL}$	3.1							
Operating and Storage Temperature Range	T_J, T_{STG}	-55to+150							$^{\circ}\text{C}$

Note:1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B

with 0.5×0.5"(13×13mm)cop

**Fig.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT****Fig.2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT****Fig.3 - TYPICAL REVERSE CHARACTERISTICS****Fig.4 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT****Fig.5 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT**