YEA SHIN TECHNOLOGY CO., LTD

GBU6A THRU GBU6M

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 6.0 Amperes

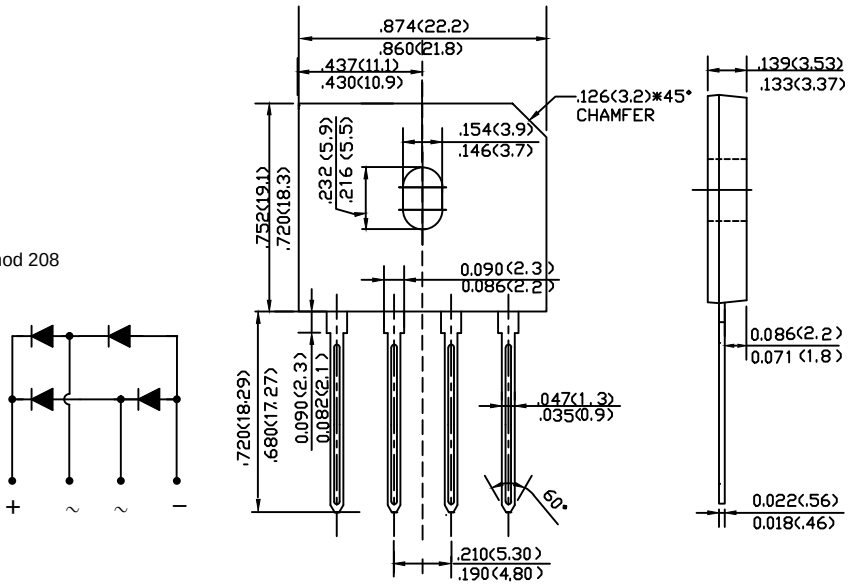
FEATURES

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- 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 Unit:inch(mm)



Maximum Rating and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBU 6A	GBU 6B	GBU 6D	GBU 6G	GBU 6J	GBU 6K	GBU 6M	UNIT
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
Average Rectified Output Current (Note 1) @Tc=90℃	$I_{F(AV)}$	6.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Forward Voltage per element @IF=3A @IF=6A	V_F	1.0 1.1							V
Peak Reverse Current @T_A=25℃ At Rated DC Blocking Voltage @T_A=125℃	I_R	5.0 500							uA
I^2t Raging for fusing (t<8.3ms)	I^2t	93							A^2s
Typical Junction Capacitance per leg (Note 2)	C_J	65							pF
Typical Thermal Resistance per leg (Note 3)	$R_{\theta JA}$	31							℃/W
	$R_{\theta JL}$	10.9							
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							℃

Note: 1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
3. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.

DEVICE CHARACTERISTICS

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Fig. 1 Output Current Derating Curve

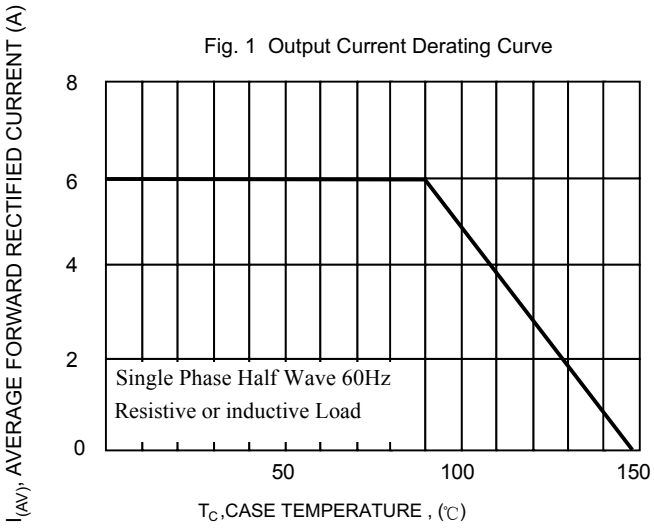

Fig. 2 Typical Forward Characteristics (per leg)

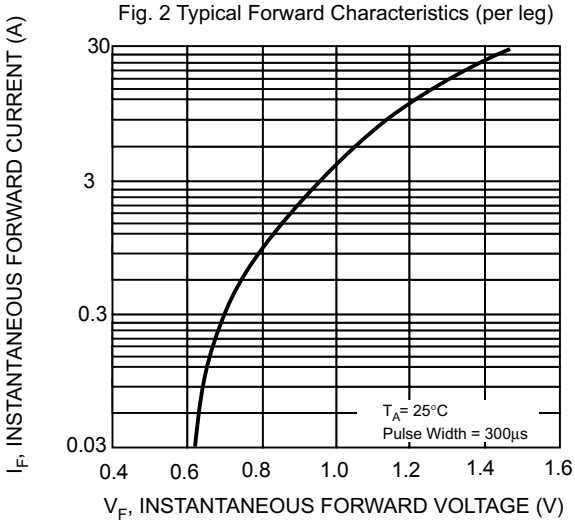

Fig. 3 Maximum Peak Forward Surge Current (per leg)

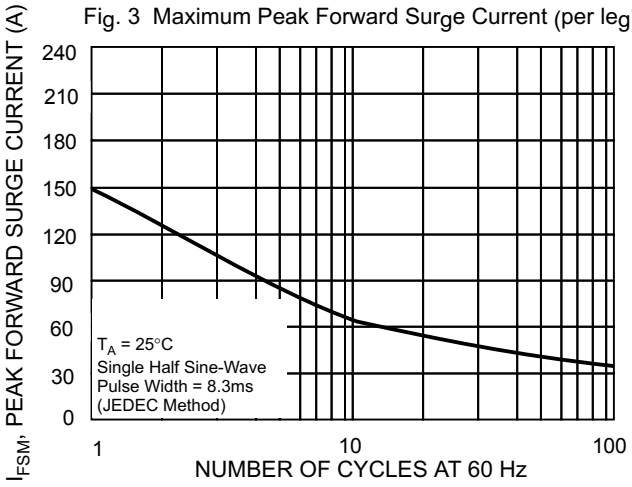

Fig. 4 Typical Junction Capacitance