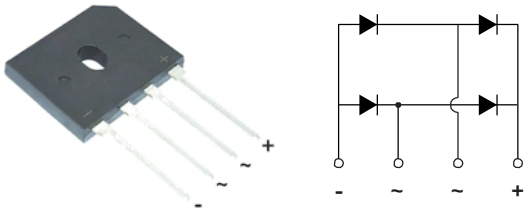
GBU



Features

- ROHS compliant
- Glass passivated chip
- High forward surge capability
- Meet MSL level 1, per J-STD-020 LF maximum peak of 250 °C
- Solder dip 260 °C / 40S
- Component in accordance to ROHS 2002/95/EC and WEEE 2002/96/WC
- UL recognition, file number E342874

Primary characteristics	
$I_{F(AV)}$	6.0A
V_{RRM}	200V to 800V
I_{FSM}	150A
I_{RM}	5uA
V_{FM} at I_F=3A	1.05V
T_J max.	150 °C

Applications

Ideal for ac-to-dc bridge full wave rectification suck as SMPS, home applianes, office equipment, indusrial automation applicatios

Mechanical data

- Case: GBU
- Epoxy meets UL 94 V-0 flammability rating
- Terminals: Tin plated leads.
- Polarity: As marked.
- Mounting Torque:10cm-kg(8.8 inches-lbs)max.
- Recommended Torque:5.7 cm-kg(5 inches-lbs)

Maximum rating (Ta=25°C unless otherwise noted)

Parameter		Sym	GBU			Unit
			6A02	6A06	6A08	
Max. repetitive peak reverse voltage		V_{RRM}	200	600	800	V
Max. RMS reverse voltage		V_{RMS}	140	420	560	V
Max. DC blocking voltage		V_{DC}	200	600	800	V
Max. average forward current		$I_{F(AV)}$	6A			A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave		I_{FSM}	150			A
Rating for fusing,1ms≦ t≦8.3ms		I^2t	93			A^2S
Max. instantaneous forward voltage drop per diode		V_{FM}	1.05(3A)			V
Max. instantaneous reverse current at rated DC blocking voltage	Ta=25 °C	I_{RM}	5			μA
	Ta=125 °C		250			μA
Operating junction temperature		T_J	-55 ~ +150			°C
Storage temperature		T_{STG}	-55 ~ +150			°C
Thermal resistance junction to ambient（Note2）		$R_{\Theta J-A}$	23			°C/W
Thermal resistance junction to cover (Note1)		$R_{\Theta J-C}$	3.4			°C/W

Notes

(1) Unit case mounted on aluminum plate heatsink

(2) Units mounted on PCB with 0.5" x 0.5" (12 mm x 12 mm) copper pads and 0.375" (9.5 mm) lead length

Ordering information (Example)

PREFERRED	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
GBU6A06	3.565	45	20	Tube
GBU6A06	3.565	51	250	Paper tray

Typical characteristics

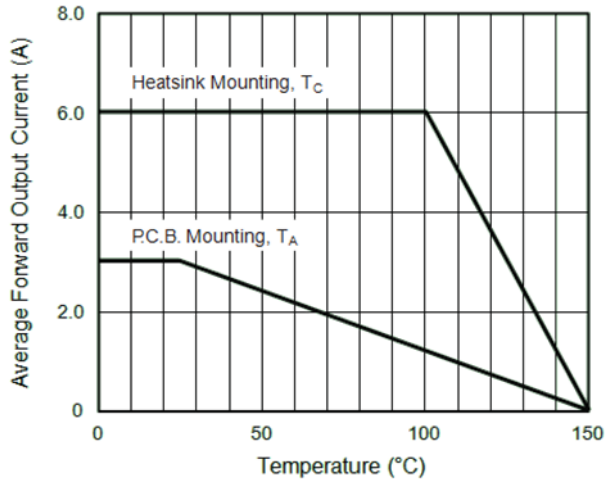
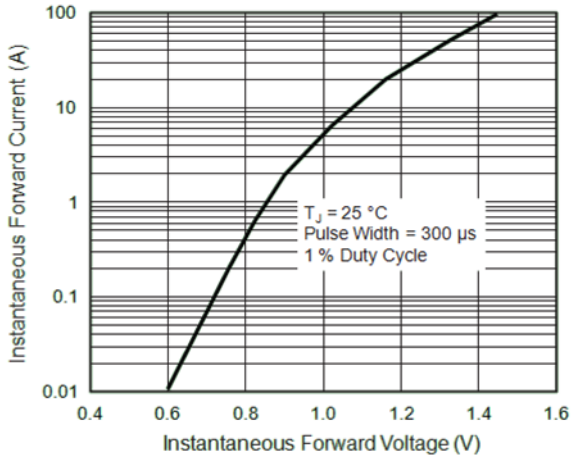
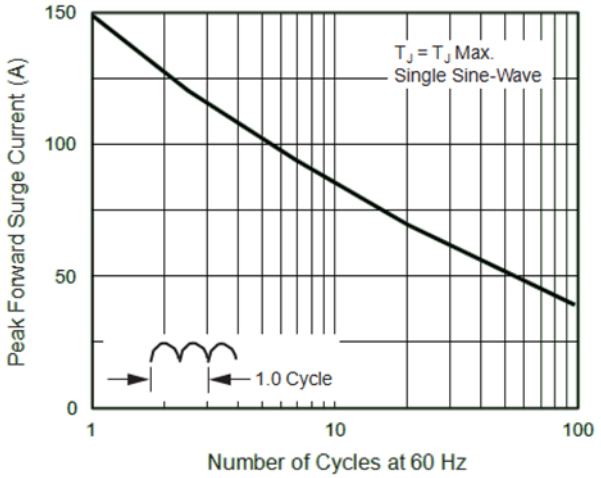


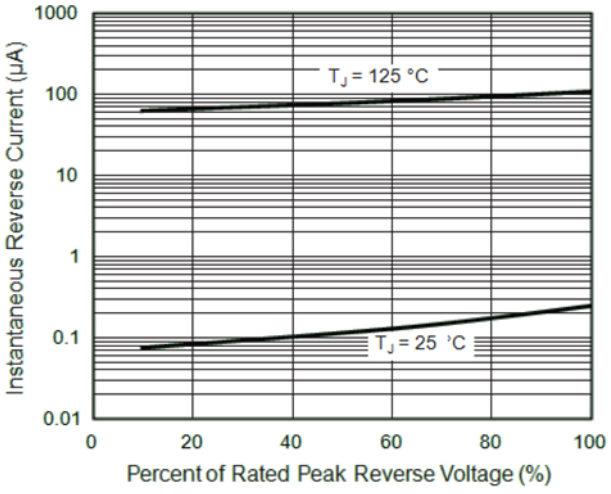
Fig. 1 - Derating Curve Output Rectified Current



Typical Instantaneous Forward Characteristics Per Diode

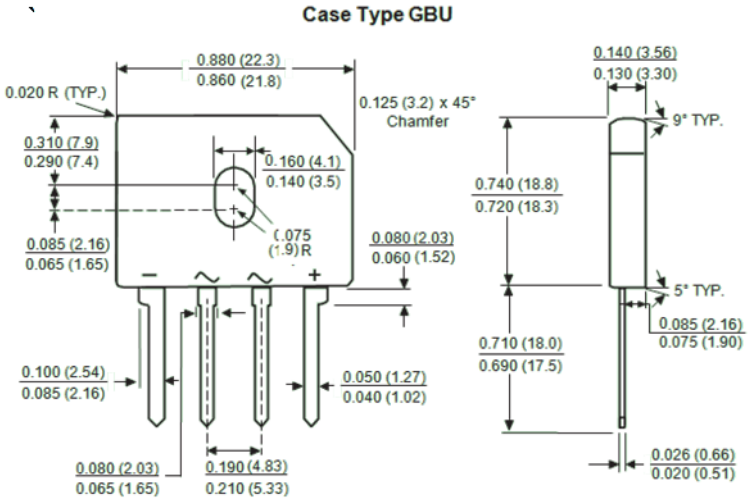


Maximum Non-Repetitive Peak Forward Surge Current Per Diode



Typical Reverse Leakage Characteristics Per Diode

Package outline dimensions



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