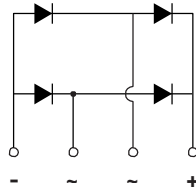
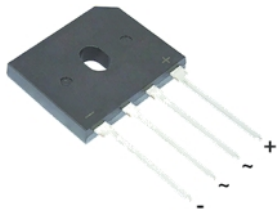


GBU



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 1000V
I_{FSM}	175A
I_{RM}	5uA
V_{FM} at $I_F=6A$	1.0V
T_J max.	150 °C

Applications

Ideal for ac-to-dc bridge full wave rectification such as SMPS, home appliances, office equipment, industrial automation applications

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
		602	604	606	608	610	
Max. repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Max. RMS reverse voltage	V_{RMS}	140	280	420	560	700	V
Max. DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Max. average forward current	$I_{F(AV)}$	6					A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	150					A
Rating for fusing, $1ms \leq t \leq 8.3ms$	I^2t	127					A ² S
Max. instantaneous forward voltage drop per diode	V_{FM}	1.0 (6A)					V
Max. instantaneous reverse current at rated DC blocking voltage	I_{RM}	5					μA
		500					μA
Operating junction temperature	T_J	-55 ~ +150					°C
Storage temperature	T_{STG}	-55 ~ +150					°C
Typical thermal resistance (Note2)	R_{J-A}	21					°C/W
	R_{J-C}	2.5					°C/W
Typical junction capacitance (Note1)	C_J	68					pF

Notes

- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (2) Units mounted in free air, no heatsink on PCB, 0.5" x 0.5" (12 mm x 12 mm) copper pads, 0.375" (9.5 mm) lead length



Ordering information (Example)

PREFERRED	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
GBU606	3.857	45	20	Tube
GBU606	3.857	51	250	Paper tray

Typical characteristics

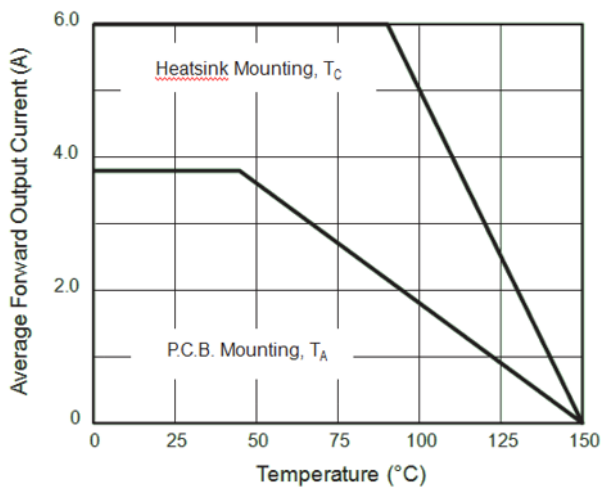
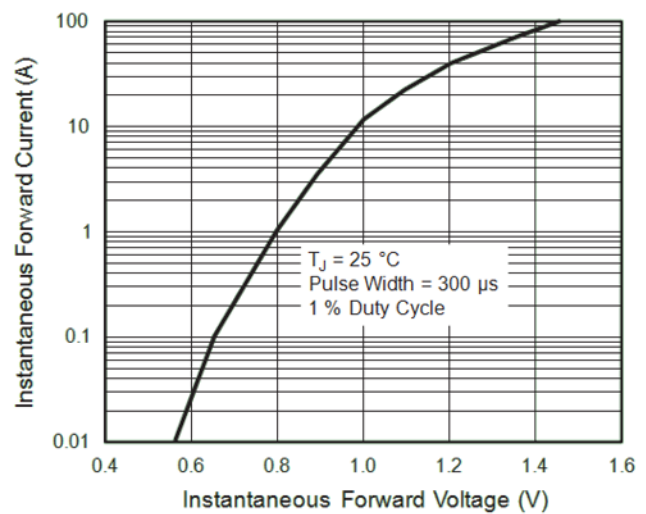
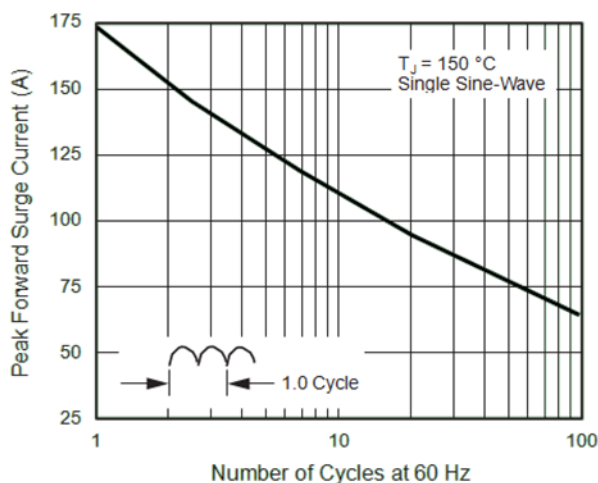


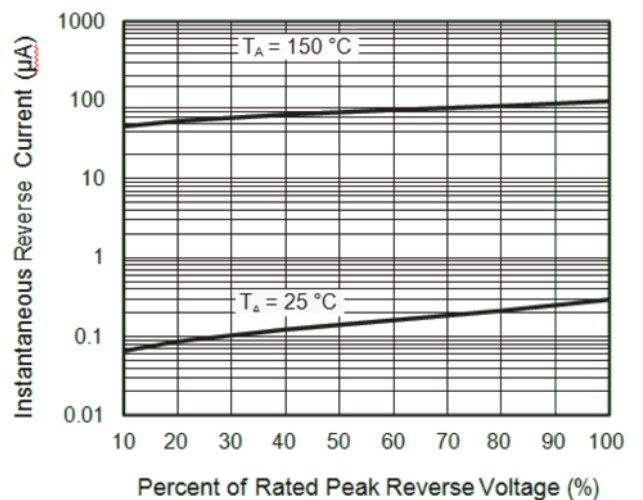
Fig. 1 - Derating Curve Output Rectified Current



Typical Forward Characteristics Per Diode

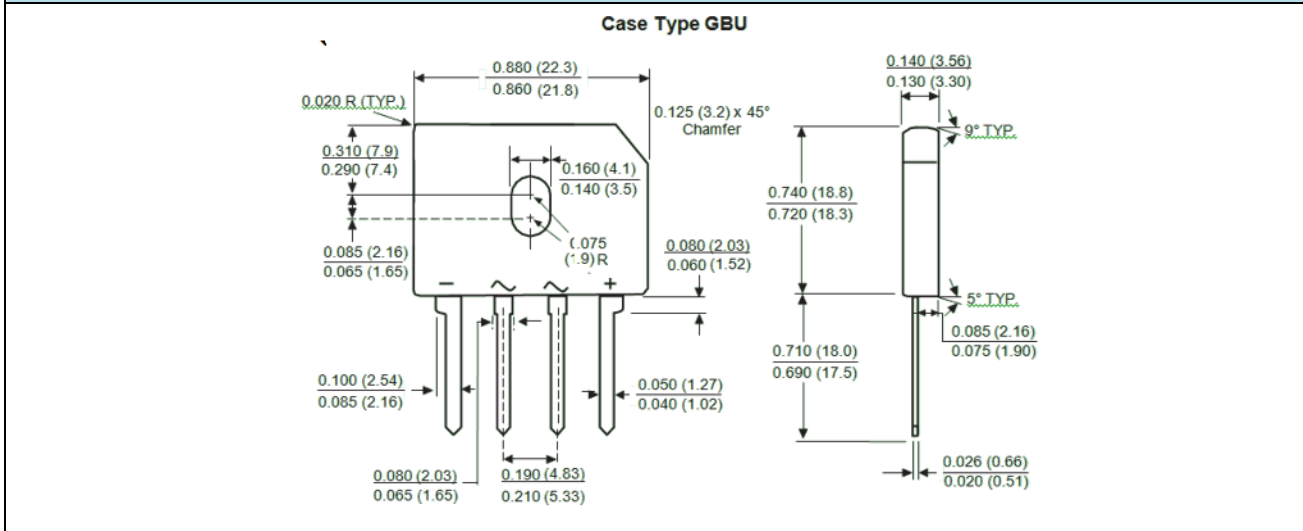


Maximum Non-Repetitive Peak Forward Surge Current Per Diode



Typical Reverse Leakage Characteristics Per Diode

Package outline dimensions



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