GBL

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

$I_{F(AV)}$	2.0A
V_{RRM}	50V to 1000V
I_{FSM}	65A
I_{RM}	5uA
V_{FM} at I_F=1.0A	1.0V
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: GBL
- 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	GBL							Unit
			GBL 2005	GBL 201	GBL 202	GBL 204	GBL 206	GBL 208	GBL 210	
Max. repetitive peak reverse voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Max. RMS reverse voltage		V_{RMS}	35	70	140	280	420	560	700	V
Max. DC blocking voltage		V_{DC}	50	100	200	400	600	800	1000	V
Max. average forward current		$I_{F(AV)}$	2.0							A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave		I_{FSM}	65.0							A
Rating for fusing,1ms≦ t≦8.3ms		I^2t	17							A^2S
Max. instantaneous forward voltage drop per diode		V_{FM}	1.0 (1.0)							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
Typical thermal resistance (Note1)		$R_{\Theta J-A}$	32							°C/W
		$R_{\Theta J-C}$	13							°C/W

Notes

(1) Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B with 0.47" x 0.47" (12mm x 12mm) Copper Pads.

Ordering information (Example)				
PREFERRED	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
GBL210				

Typical characteristics

FIG.1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

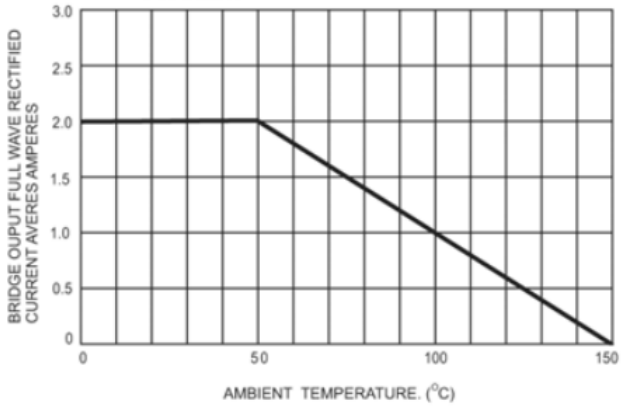


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS

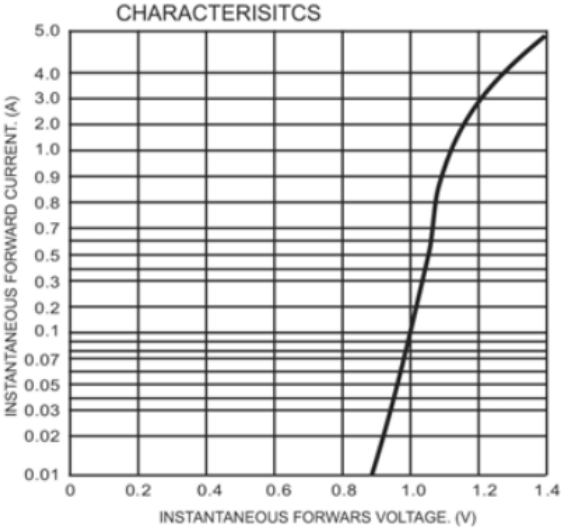


FIG.3- TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

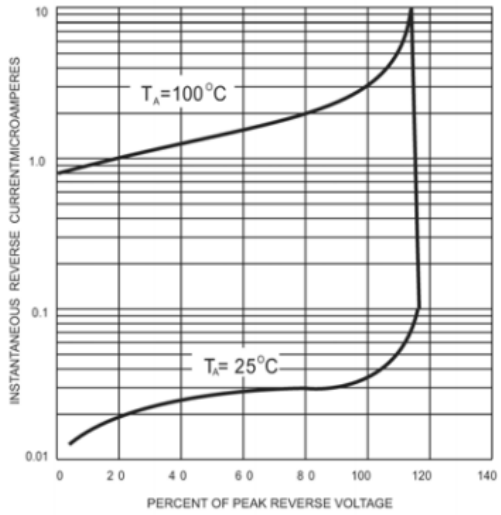
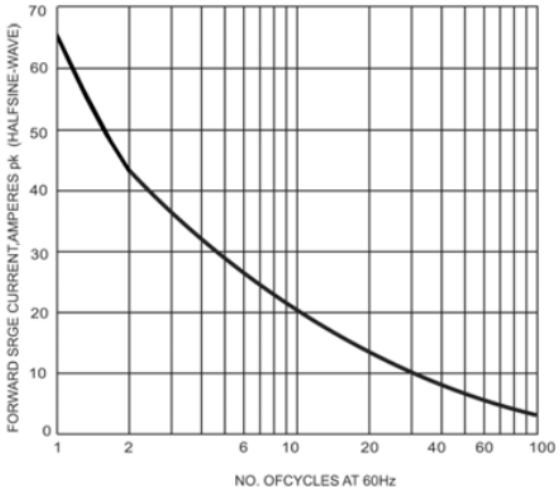
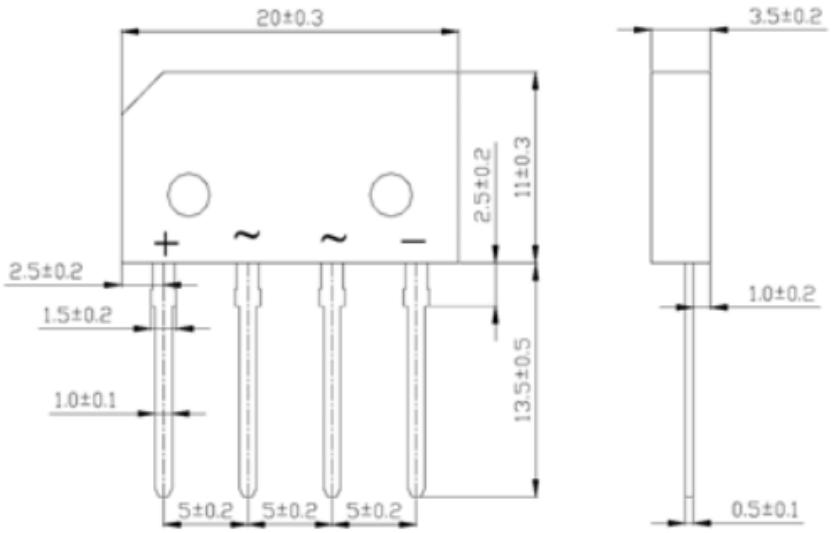


FIG.4- MAXIMUM NON-REPETITEVE PEAK FORWARD SURGE CURRENT



Package outline dimensions



Package outline dimensions in millimeters

Golden SEMI Inc. - Legal Notice

Disclaimer – All data and specifications are subject to changes without notice

GOLDEN SEMI Inc, it's affiliates, agents, distributors and employees neither accept nor assume any responsibility for errors or inaccuracies. All data and specifications are intended for information and provide a product description only. Electrical and mechanical parameters listed in GOLDEN SEMI data sheets and specifications will vary dependent upon application and environmental conditions . GOLDEN SEMI is not liable for any damages occurred or resulting from any circuit, product or end-use application for which it's products are used. GOLDEN SEMI products are not intended or designed for use in life saving or sustaining apparatus and purchase of any GOLDEN SEMI products automatically indemnifies GOLDEN SEMI against any claims or damages resulting from application malfunction