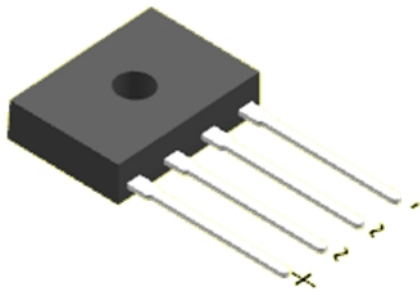


GBP



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

$I_{F(AV)}$	3A
V_{RRM}	600V to 1000V
I_{FSM}	72A
I_{RM}	5uA
V_{FM} at $I_F=1.5A$	1.05V
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: GBP
- 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	GBP			Unit
		306	308	310	
Max. repetitive peak reverse voltage	V_{RRM}	600	800	1000	V
Max. RMS reverse voltage	V_{RMS}	420	560	700	V
Max. DC blocking voltage	V_{DC}	600	800	1000	V
Max. average forward current	$I_{F(AV)}$	3			A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	72			A
Rating for fusing, $1ms \leq t \leq 8.3ms$	I^2t	35			A ² S
Max. instantaneous forward voltage drop per diode	V_{FM}	1.05(1.5A)			V
Max. instantaneous reverse current at rated DC blocking voltage	I_{RM}	Ta=25 °C	5		μA
		Ta=125 °C	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}	9			°C/W
Typical junction capacitance (Note1)	C_J	25			pF

Notes

- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (2) Device mounted on 30mm x 30mm x 1mm Cu Plate Heatsink



Ordering information (Example)

PREFERRED	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
GBP306				

Typical characteristics

FIG.1- FORWARD CURRENT DERATING CURVE

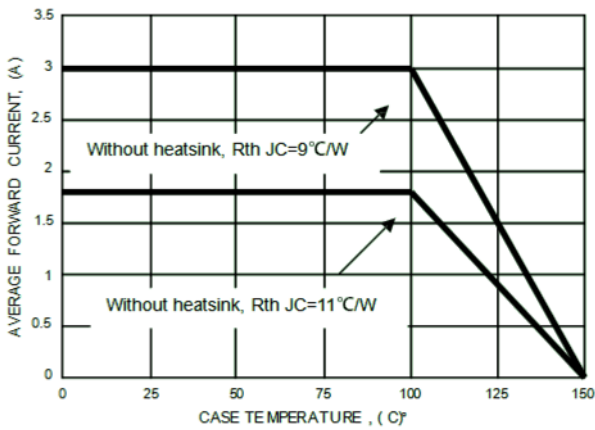


FIG.3- TYPICAL FORWARD CHARACTERISTICS

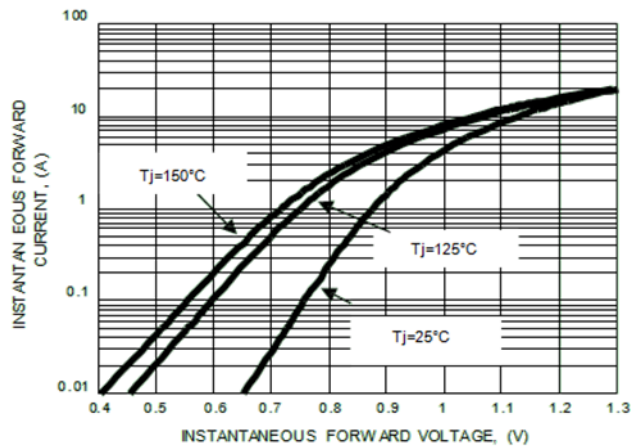


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

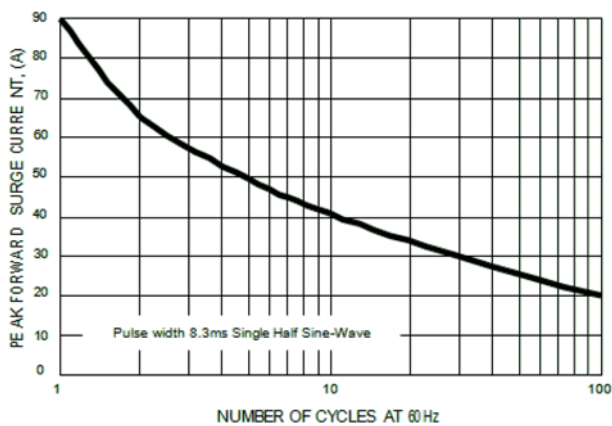
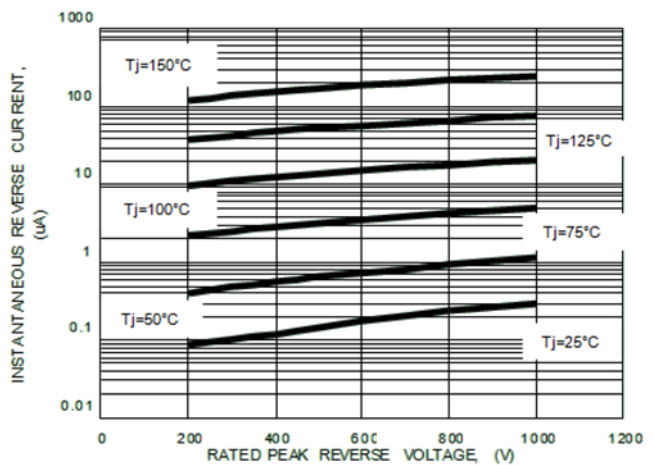
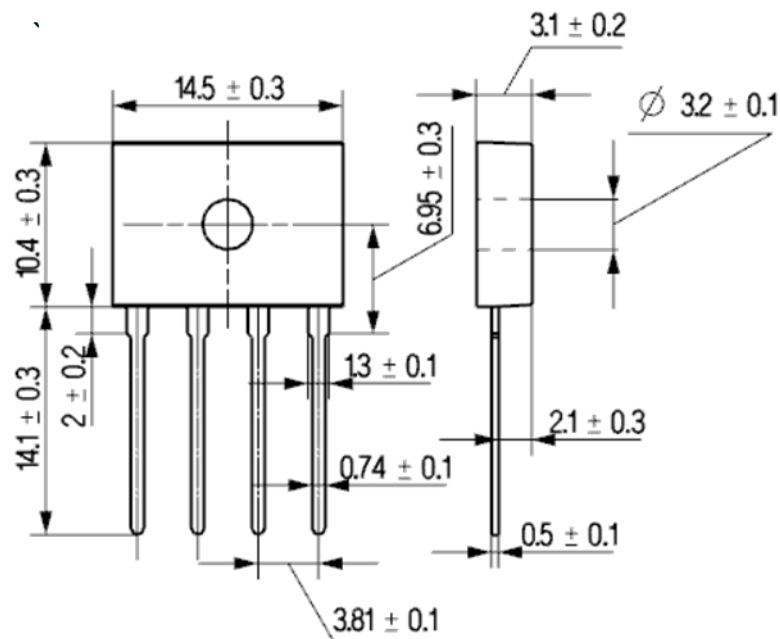


FIG.4- TYPICAL REVERSE CHARACTERISTICS



Package outline dimensions



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