GBU30A THRU GBU30M

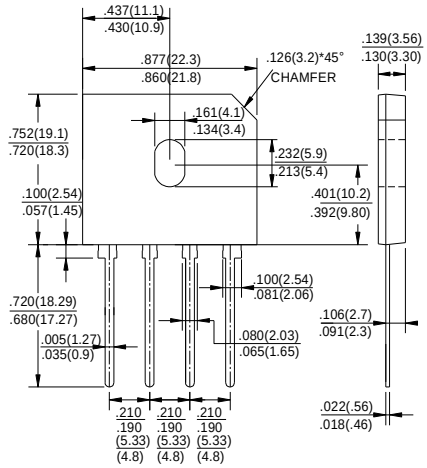
GLASS PASSIVATED BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts
Forward Current - 30.0 Amperes

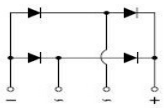
Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250℃/10 seconds at terminals

GBU



Dimensions in inches and (millimeters)



Mechanical Data

Case : Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any

Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	GBU 30A	GBU 30B	GBU 30D	GBU 30G	GBU 30J	GBU 30K	GBU 30M	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current with heatsink	$I_{(AV)}$	30.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	350.0							A
Rating for fusing (t=8.3ms, Ta=25℃)	I^2t	508							A^2s
Maximum instantaneous forward voltage at 15.0A	V_F	1.10							V
Maximum DC reverse current T_A =25℃ at rated DC blocking voltage T_A=125℃	I_R	5.0 500							u A
Typical junction capacitance (Note 1)	C_J	55.0							pF
Typical thermal resistance	R_{qJA}	26							°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150							°C

Note:
1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.Mounted on glass epoxy PC board with 1.3mm² solder pad.
3.Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink

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Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

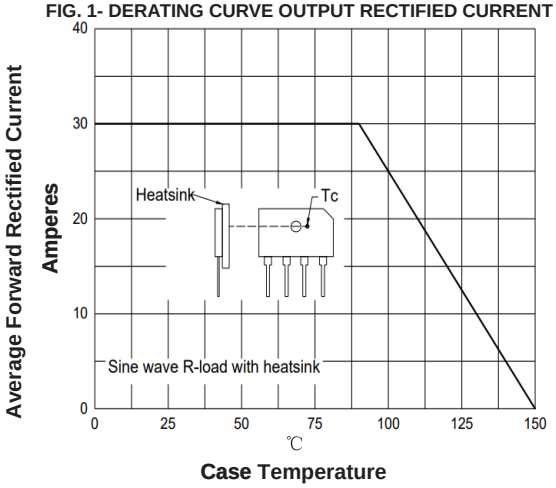


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

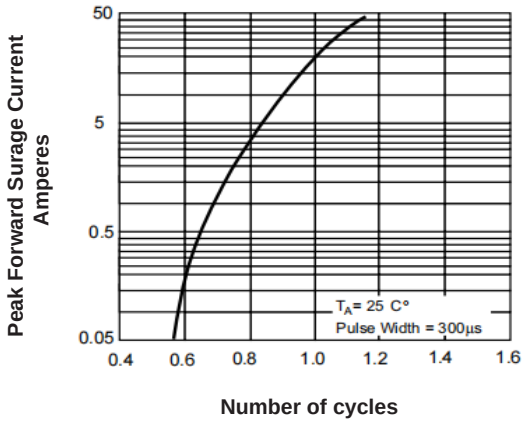


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

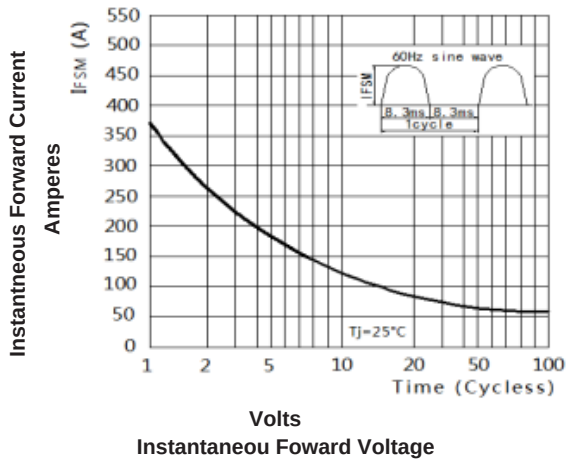
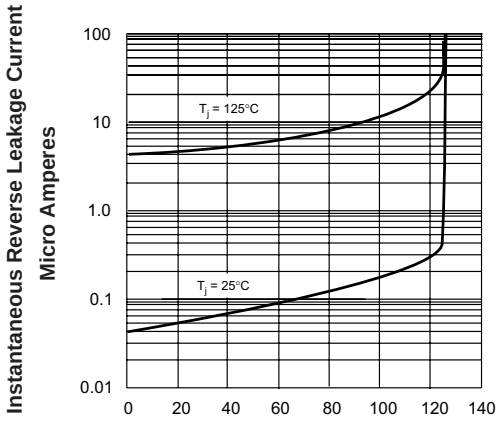


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Device	Package	Shipping
GBU30A-GBU30M	GBU	500 Units/Box