

FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

Bridge Rectifier
GBU

FrelTec

GBU

FrelTec Bridge Rectifier

SPECIFICATION

68A	GBU ___ xxx	GBUX	P0B
Type	Type	Package	Packing
68A: Bridge Rectifier	GBU ___	GBU	P0B: bulk in box 500 pc

All products according to RoHS (2015/863/EU)

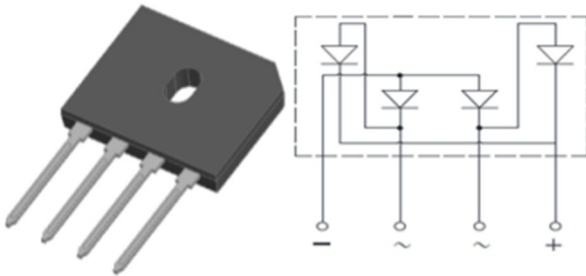
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GBU

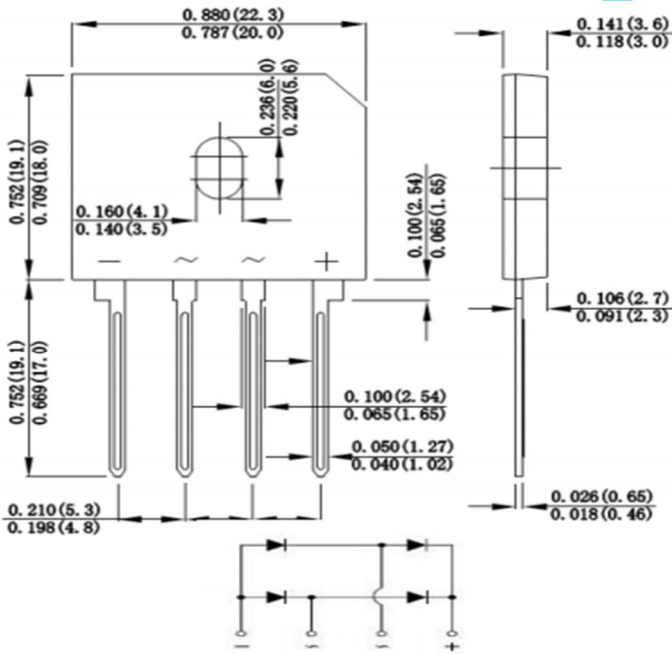
FrelTec Bridge Rectifier

GBU8005 thru GBU810

PACKAGE OUTLINE



GBU



Dimensions in inches and (millimeters)

GBU

FrelTec Bridge Rectifier

Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified,

Parameter	SYMBOLS	GBU 8005	GBU 801	GBU 802	GBU 804	GBU 806	GBU 808	GBU 810	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	$I_{(AV)}$	8.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	175.0							A
Rating for fusing (t=8.3ms, $T_A=25\text{ C}$)	I_t^2	127							A_s^2
Maximum instantaneous forward voltage at 8.0A	V_F	1.10							V
Maximum DC reverse current $T_A=25\text{ C}$ at rated DC blocking voltage $T_A=125\text{ C}$	I_R	2.0 200							$\mu\text{ A}$
Typical junction capacitance (Note 1)	C_J	48.0							pF
Typical thermal resistance	R_{qJA}	25.0							C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							C

Characteristics(Typical)

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FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

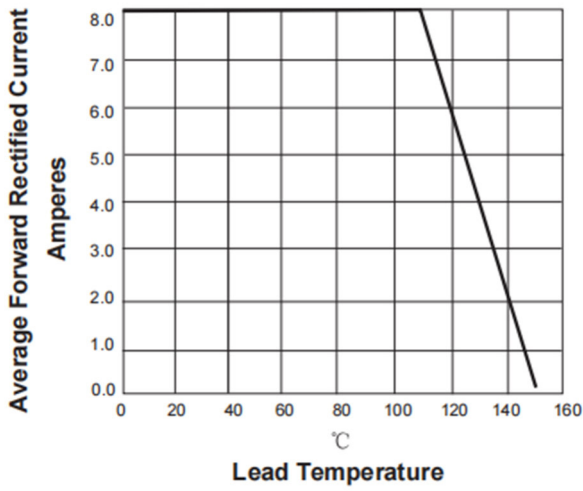


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

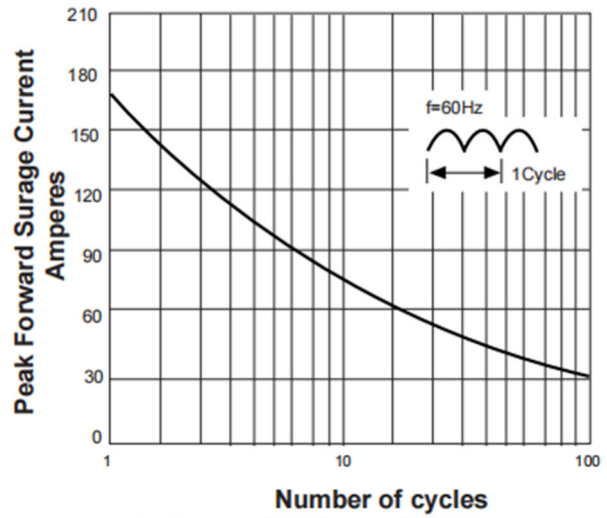


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

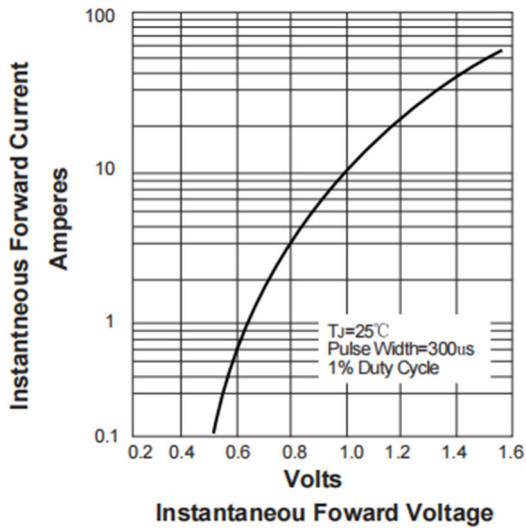
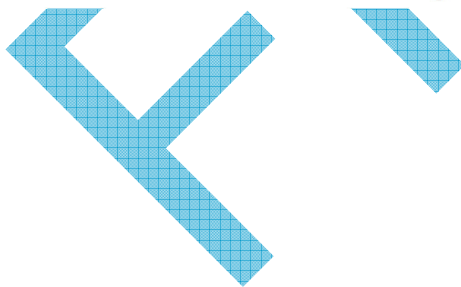
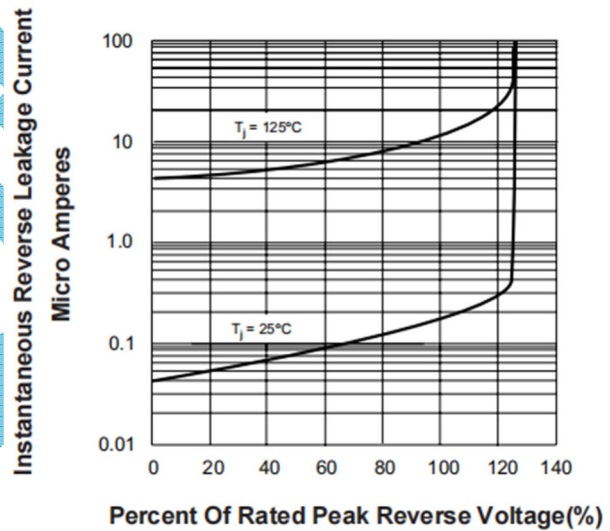


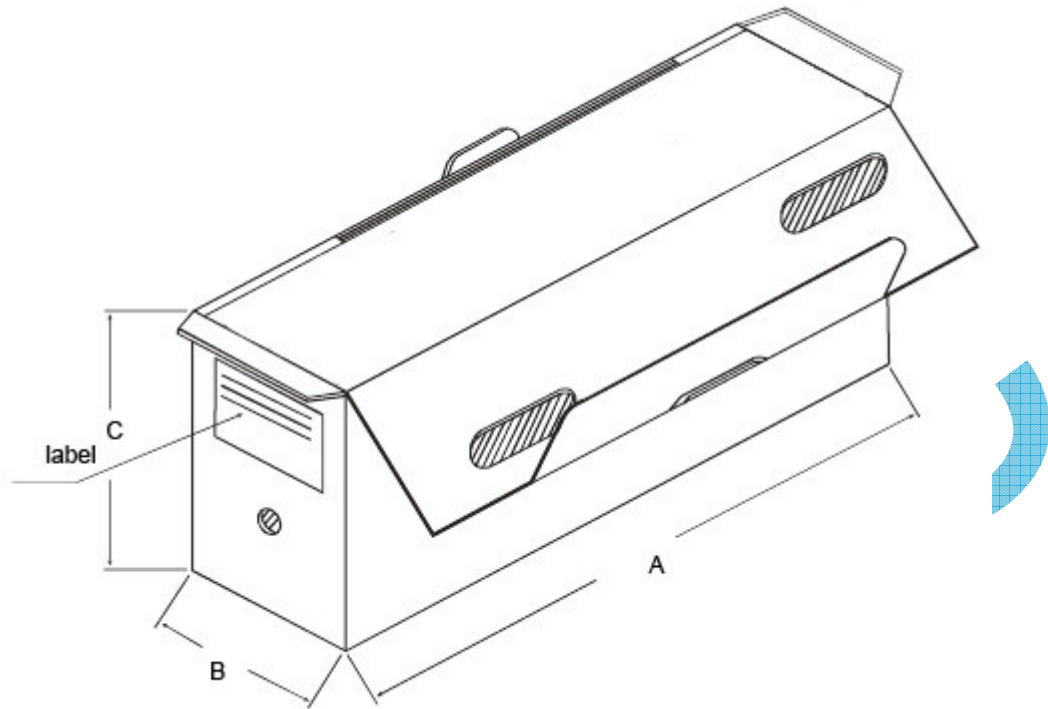
FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



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FrelTec Bridge Rectifier

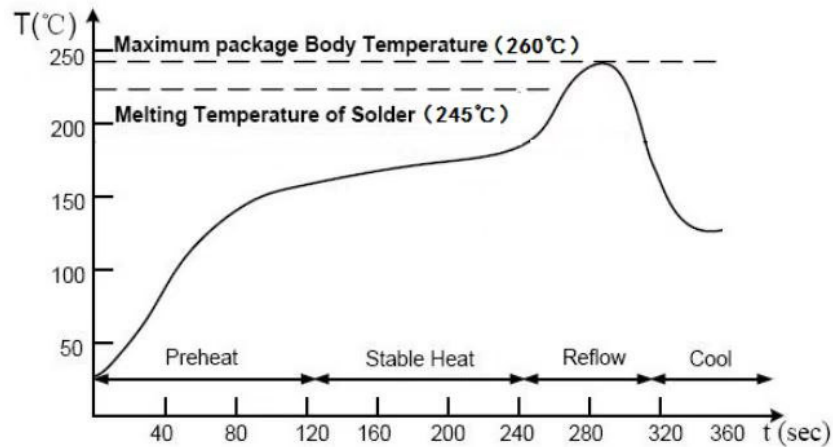
Tape in box



Packaging	Available Product Outlines	Quantity Box
BULK PACK	GBU	500

Lead Free Reflow Soldering Profile

Suggested Soldering Temperature Profile



Note

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 260°C for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

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Stock period

The performance of these products, including the solderability, is guaranteed for 12 month, provided that they remain packed as they were when delivered and stored at a temperature of 0-35°C and a relative humidity 35-75%RH

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