

GBJ1006 – GBJ1010(LS)

GLASS PASSIVATED BRIDGE RECTIFIERS

**REVERSE VOLTAGE – 600 to 1000 Volts
FORWARD CURRENT – 10 Amperes**

FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability.
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0
- UL Recognition File # E95060

MECHANICAL DATA

- Polarity : Symbols molded on body
- Weight : 0.23 ounces, 6.6 grams
- Mounting position : Any

GBJ

GBJ		
Dim.	Min.	Max.
A	29.70	30.30
B	19.70	20.30
C	17.0	18.0
D	4.70	4.90
E	10.80	11.20
F	2.30	2.70
G	3.10 ϕ	3.40 ϕ
H	3.40	3.80
I	4.40	4.80
J	2.50	2.90
K	0.60	0.80
L	2.00	2.40
M	0.90	1.10
N	9.80	10.20
O	7.30	7.70
P	3.80	4.20
Q	(3.0) \times 45 $^\circ$	

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	GBJ1006	GBJ1008	GBJ1010	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	600	800	1000	V
Maximum RMS voltage	V_{RMS}	420	560	700	V
Maximum DC blocking voltage	V_{DC}	600	800	1000	V
Maximum average forward Rectified current @TC =110°C (with heatsink) (without heatsink)	$I_{(AV)}$		10.0 3.0		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}		170		A
Maximum forward voltage at 5.0A DC	V_F		1.05		V
Maximum DC reverse current at rated DC Blocking voltage @TJ =25°C @TJ =125°C	I_R		10 500		μ A
I^2t rating for fusing (t = 8.3ms)	I^2t		120		A ² S
Typical junction capacitance per element (Note 1)	C_J		55		pF
Typical thermal resistance (Note2)	R_{thJC}		1.4		°C/W
Operating temperature range	T_J		-55 to +150		°C
Storage temperature range	T_{STG}		-55 to +150		°C

Note: REV-8,Oct.-2021, KBDG03

1. Device mounted on 150mm x 150mm x 1.6mm Cu Plate Heat sink.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

RATING AND CHARACTERISTIC CURVES
GBJ1006 - GBJ1010

FIG.1- FORWARD CURRENT DERATING CURVE

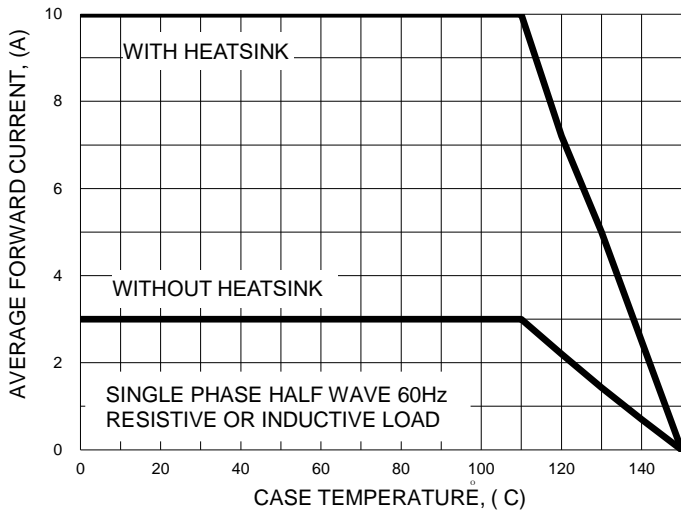


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

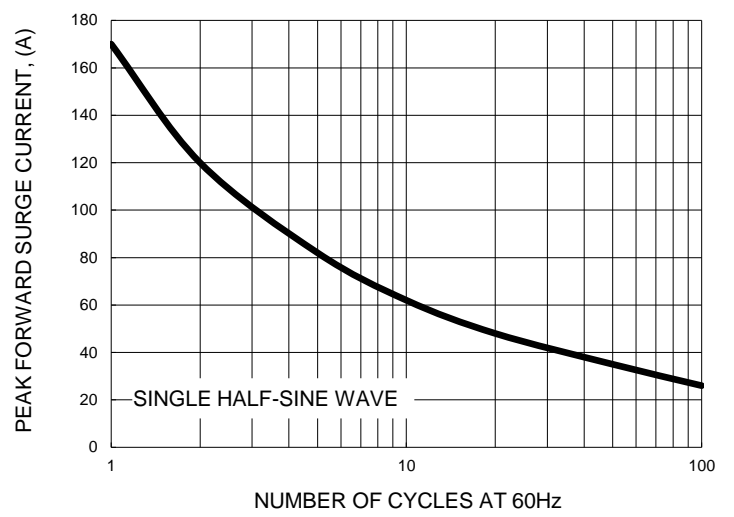


FIG.3- TYPICAL JUNCTION CAPACITANCE

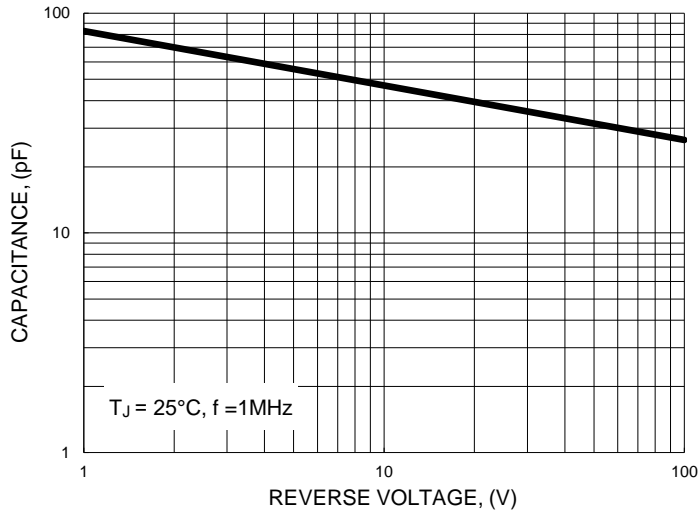


FIG.4- TYPICAL FORWARD CHARACTERISTICS

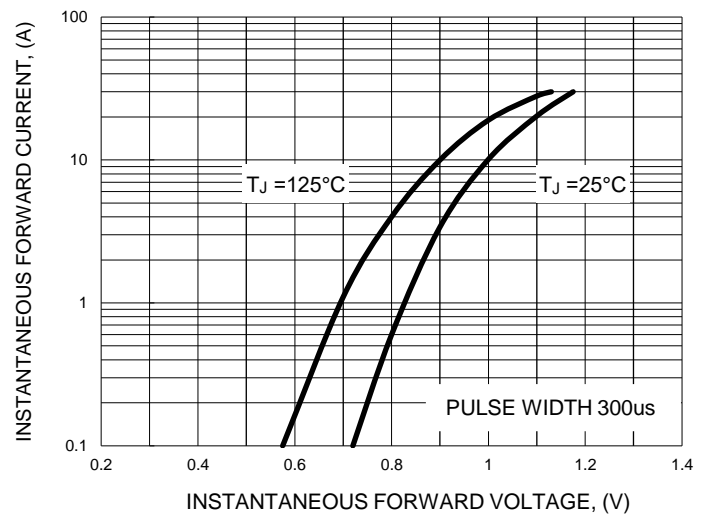
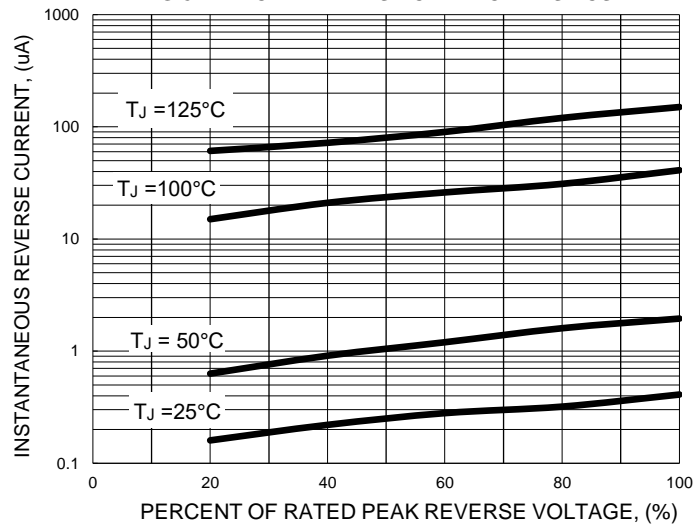


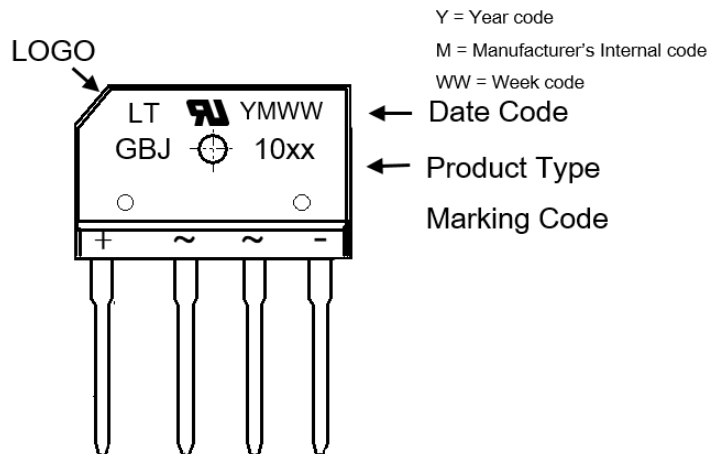
FIG.5- TYPICAL REVERSE CHARACTERISTICS



Ordering Information :

Part Number	Package	Packing	
		Qty.	Carrier
GBJ1006_HF	GBJ	15	Tube
GBJ1008_HF	GBJ	15	Tube
GBJ1010_HF	GBJ	15	Tube

Marking Information :



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