



GBU816 GLASS PASSIVATED BRIDGE RECTIFIERS

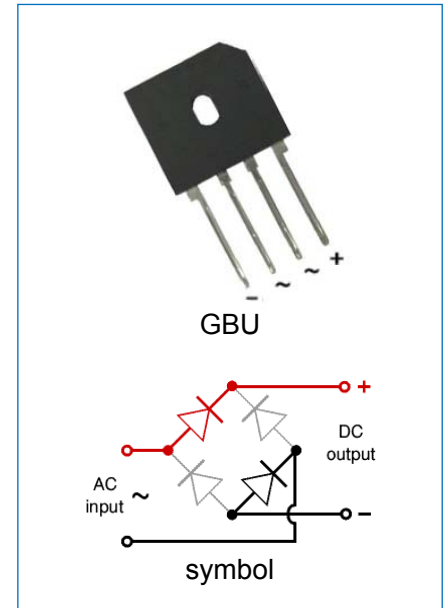
Rev.1.1

DESCRIPTION:

- ✧ Plastic package has underwriters laboratory flammability classification 94V-0
- ✧ Glass passivated chip
- ✧ Ideal for printed circuit board
- ✧ High surge current capability
- ✧ General purpose use in AC/DC bridge full wave rectification ,for SMPS, lighting ballaster, adapter. etc.

MECHANICAL DATA

- ✧ Case: GBU molded plastic
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Polarity: Symbol marking on body.
- ✧ Weight:3.94g



ABSOLUTE MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified.)

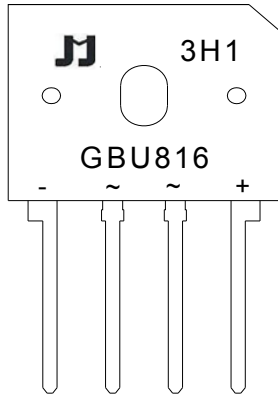
Parameter	Symbol	GBU816	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1600	V
Maximum RMS voltage	V_{RMS}	1400	V
Maximum DC blocking voltage	V_{DC}	1600	V
Average rectified output current at $T_C=100^\circ C$	I_o	8	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200	A
Maximum forward voltage per diode @ $I_F=4A$	V_F	1.1	V
Maximum DC reverse current at rated DC blocking voltage per diode	$T_J=25^\circ C$	I_R	5
	$T_J=125^\circ C$		500
Typical junction capacitance $V_R=4.0V, f=1MHz$	C_J	60	pF
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	°C

THERMAL RESISTANCES

Symbol	Parameter	GBU816	Unit
$R_{th(j-c)}$	Junction to case (note1)	2.2	°C/W

Note1: Thermal resistance from junction to case mounted on 75mm*75mm*1.6mm Cu plate heatsink.

MARKING



GBU	Package: GBU
8	$I_O:8A$
16	$V_{RRM}:1600V$

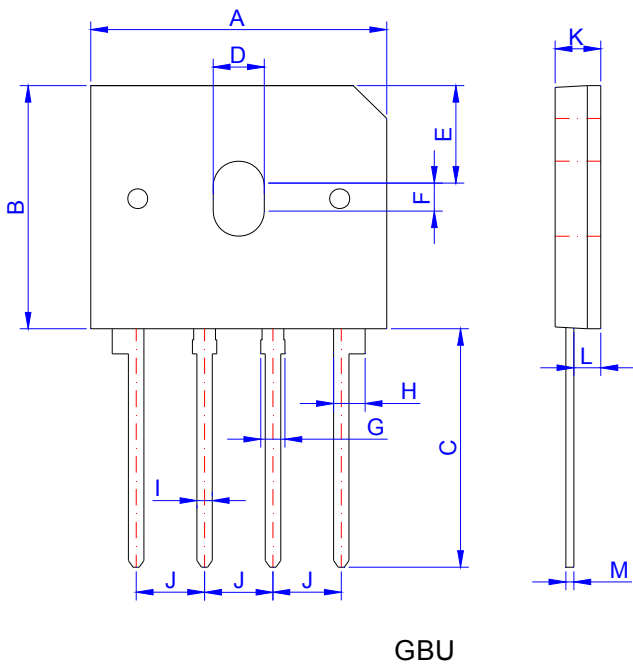
$xH1$: Month, 1、2、3 ~ 9、A、B、C

$3x1$:

2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	...
O	P	Q	R	S	T	...

$3Hx$: Batch number

PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	21.70	22.00	22.30	0.854	0.866	0.878
B	18.30	18.70	19.10	0.720	0.736	0.752
C	17.50	18.00	18.50	0.689	0.709	0.728
D	3.50	3.80	4.10	0.138	0.150	0.161
E		7.65			0.301	
F		1.90			0.075	
G		1.80			0.071	
H		2.30			0.091	
I	0.90		1.20	0.035		0.047
J	4.70	5.00	5.30	0.185	0.197	0.209
K	3.20	3.40	3.60	0.126	0.134	0.142
L		2.02			0.080	
M	0.45		0.60	0.018		0.024

PACKAGE INFORMATION-GBU

OUTLINE	UNIT WEIGHT (g/PCS) typ.	TUBE (PCS)	PER CARTON (PCS)
TUBE	3.94	20	2000

CHARACTERISTICS CURVE

FIG.1: Typical forward characteristics

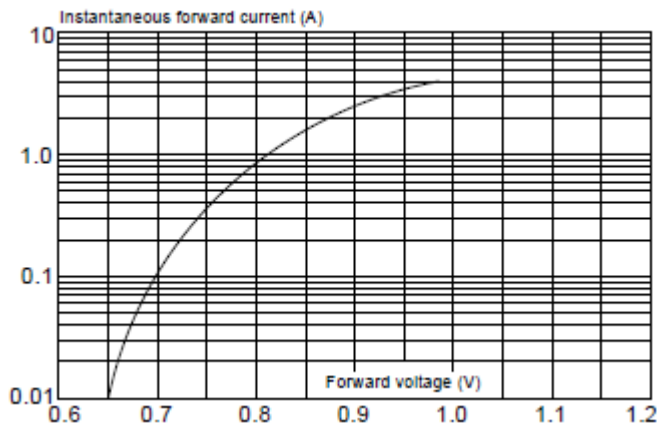


FIG.2: Typical reverse characteristics

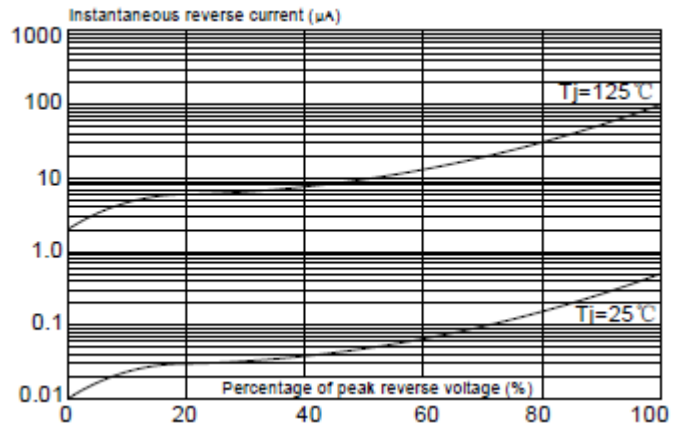


FIG.3: Maximum non-repetitive peak forward surge current

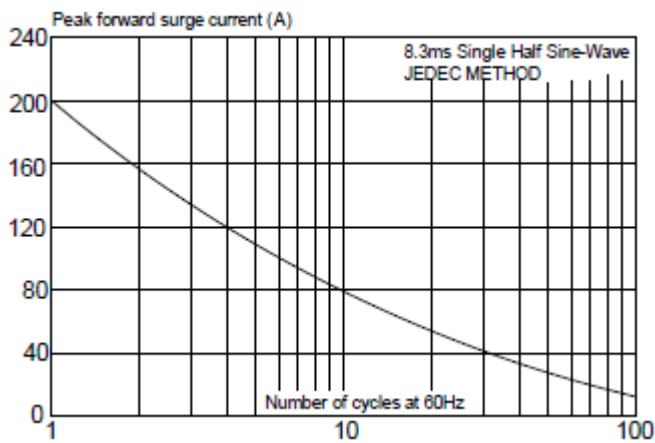
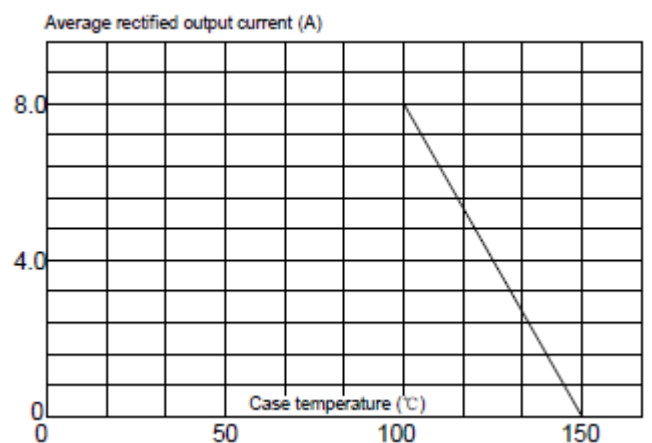


FIG.4: Average rectified output current derating curve



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