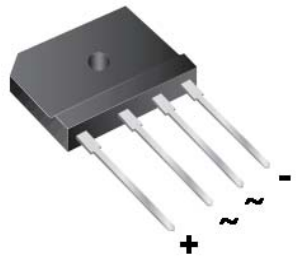
JXND ELECTRONICS CO.,LTD

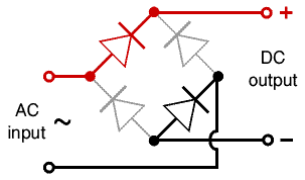
BRIDGE RECTIFIERS
GBJ2500~GBJ2510

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.



GBJ



symbol

MECHANICAL DATA

- ✧ Case: GBJ molded plastic
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Polarity: Symbol marking on body.
- ✧ Weight: 6.8gram

ABSOLUTE MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

(Rating at 25℃ ambient temperature unless otherwise specified.)

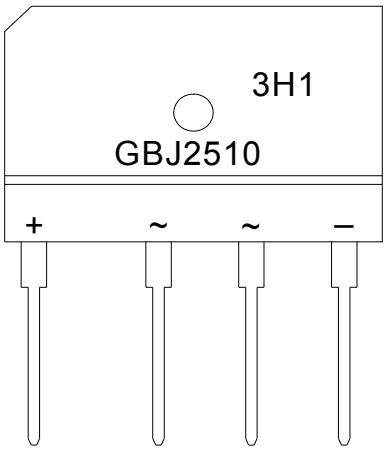
Parameter		Symbol	GBJ 2500	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	Unit
Maximum repetitive peak reverse voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage		V_{DC}	50	100	200	400	600	800	1000	V
Average rectified output current at T_C=90℃		I_O	25							A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	350							A
Maximum forward voltage per diode @I_F=12.5A		V_F	1.1							V
Maximum DC reverse current at rated DC blocking voltage per diode	T_J=25℃	I_R	5							μA
	T_J=125℃		500							μA
Typical junction capacitance V_R=4.0V, f=1MHz		C_J	85							pF
Operating junction and storage temperature range		T_J,T_{STG}	-55 to +150							℃

THERMAL RESISTANCES

Symbol	Parameter	GBJ 2500	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	Unit
$R_{th(j-C)}$	Junction to case (note1)	0.6							℃/W

Note1：Thermal resistance from junction to case mounted on 300mm*300mm*1.6mm Cu plate heatsink

MARKING



GBJ	Package: GBJ
25	I_O:25A
10	V_{RRM}:1000V

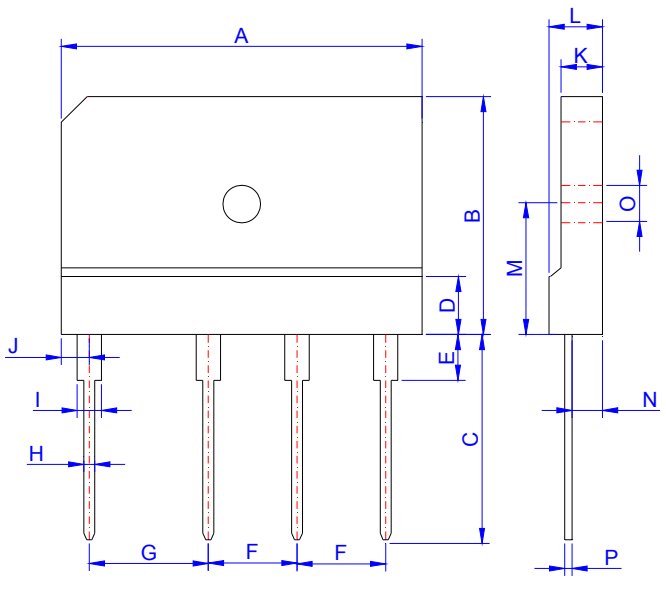
xH1：Month，1、2、3 ～ 9、A、B、C

3**x**1：

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	…

3H**x**：Batch number

PACKAGE MECHANICAL DATA



GBJ

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	29.7	30.3	1.169	1.193
B	19.7	20.3	0.776	0.799
C	17.0	18.0	0.669	0.709
D		5.10		0.201
E	3.60	4.20	0.142	0.165
F	7.30	7.70	0.287	0.303
G	9.80	10.20	0.386	0.402
H	0.90	1.10	0.035	0.043
I	2.00	2.40	0.079	0.094
J	2.30	2.70	0.091	0.106
K	3.40	3.80	0.134	0.150
L	4.40	4.80	0.173	0.189
M	10.8	11.2	0.425	0.441
N	2.50	2.90	0.098	0.114
O	3.00	3.40	0.118	0.134
P	0.60	0.80	0.024	0.031

PACKAGE INFORMATION-GBJ

OUTLINE	UNIT WEIGHT (g/PCS) typ.	TUBE (PCS)	PER CARTON (PCS)
TUBE	6.8	14	1400

CHARACTERITICS CURVE

FIG.1: Typical forward characteristics

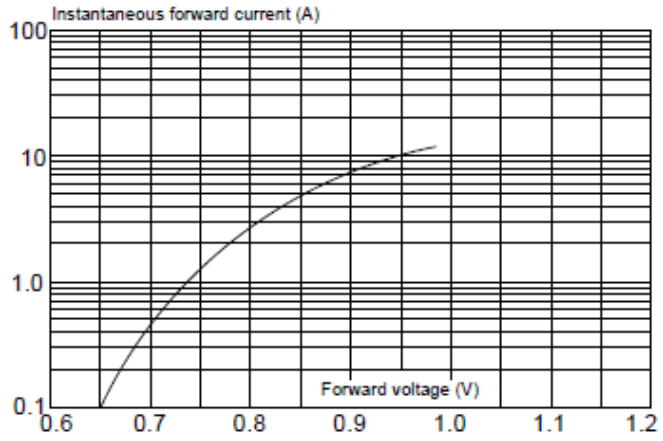


FIG.2: Typical reverse characteristics

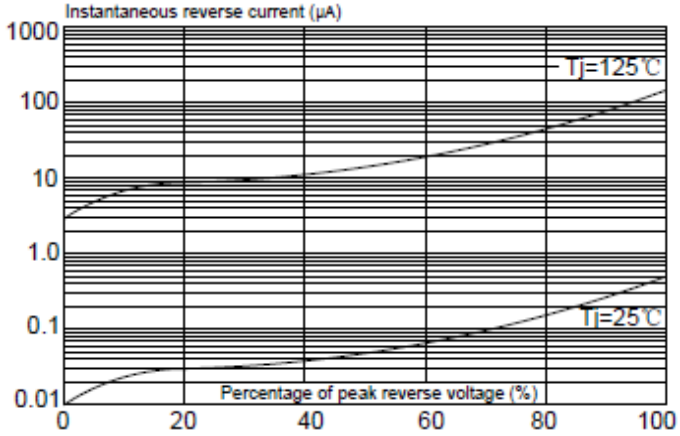


FIG.3: Maximum non-repetitive peak forward surge current

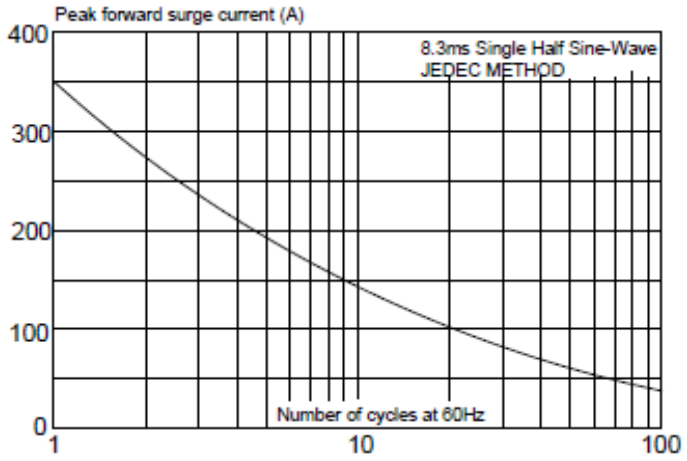


FIG.4: Average rectified output current derating curve