



GBJ2512-GBJ2516

Glass Passivated Single Phase Bridge Rectifiers



Reverse Voltage 1200 to 1600V
Forward Current 25 Amp

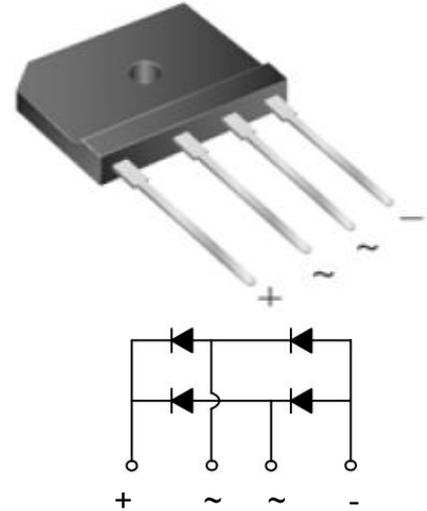
Features

- Glass passivated die construction
- Ideal for printed circuit boards
- Plastic material used carries UL flammability recognition 94V-0
- High surge current capability
- High temperature soldering guaranteed: 265°C /10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

Mechanical Data

Case: Molded plastic case
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Marked on Body
Mounting Position: Any

GBJ



Module Type

TYPE	VRRM	VRSM
GBJ2512	1200V	1300V
GBJ2514	1400V	1500V
GBJ2516	1600V	1700V

Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

Symbol	Conditions	Values	Units
IF(AV)	Maximum average forward output rectified current Tc =90°C	25	A
IFSM	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	350	A
i ² t	Rating for fusing (t<8.3ms)	500	A ² S
V _{isol}	a.c.50HZ;r.m.s.;1min	2500	V
R _{θJA} R _{θJC}	Maximum thermal resistance per leg	22 ⁽¹⁾ 1.0 ⁽²⁾	°C/W
TOR	Mounting Torque (Recommended torque:0.5 N.m)	0.8	N.m
T _j , T _{STG}	Operating Junction and storage temperature range	-55 to +150	°C
Weight	Approximate Weight	7.0	g

Electrical Characteristics (TA = 25°C unless otherwise noted)

Symbol	Conditions	Values	Units
V _F	Maximum Instantaneous Forward Voltage per leg I _{FM} =12.5A	1.1	V
I _R	Maximum DC reverse current at rated DC blocking voltage per leg TA = 25°C TA = 125°C	5.0 500	μA

- Notes: (1) Junction to ambient without heatsink
 (2) Junction to case with heatsink
 (3) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw

Ratings and Characteristics Curve (TA=25°C unless otherwise noted)

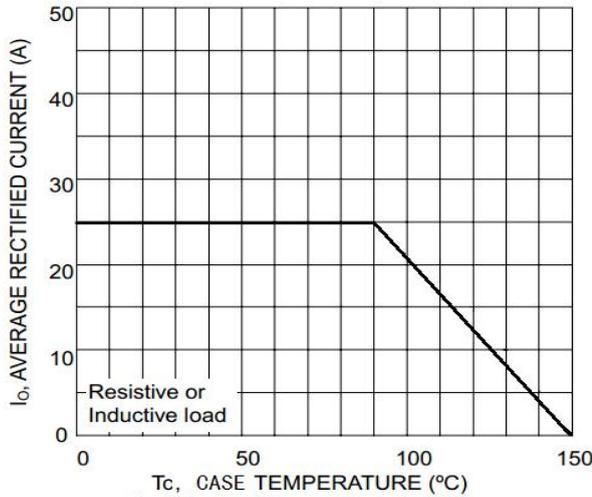


Fig.1 Forward Current Derating Curve

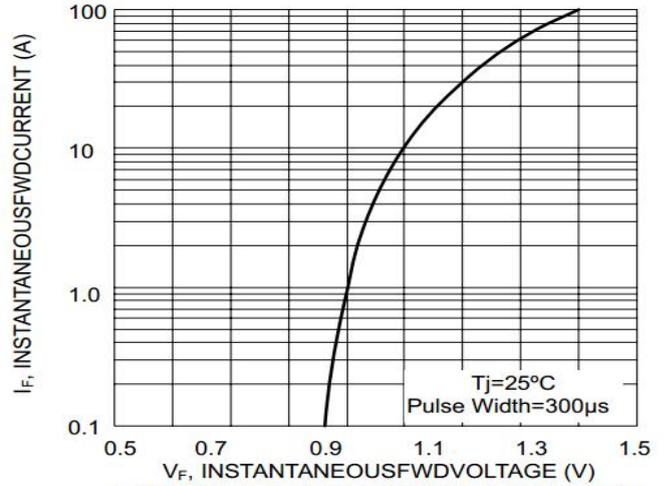


Fig.2 Typical Forward Characteristics, per element

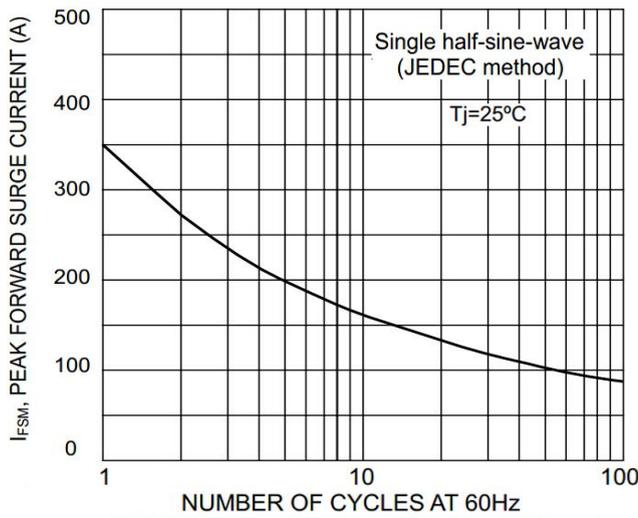


Fig.3 Maximum Non-Repetitive Surge Current

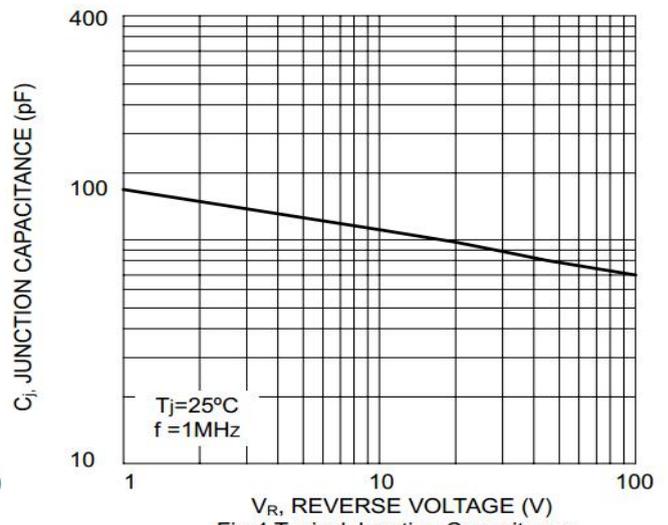


Fig.4 Typical Junction Capacitance

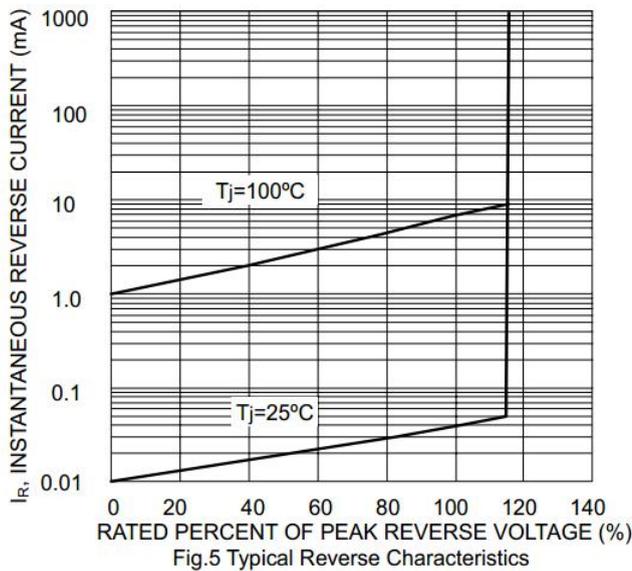
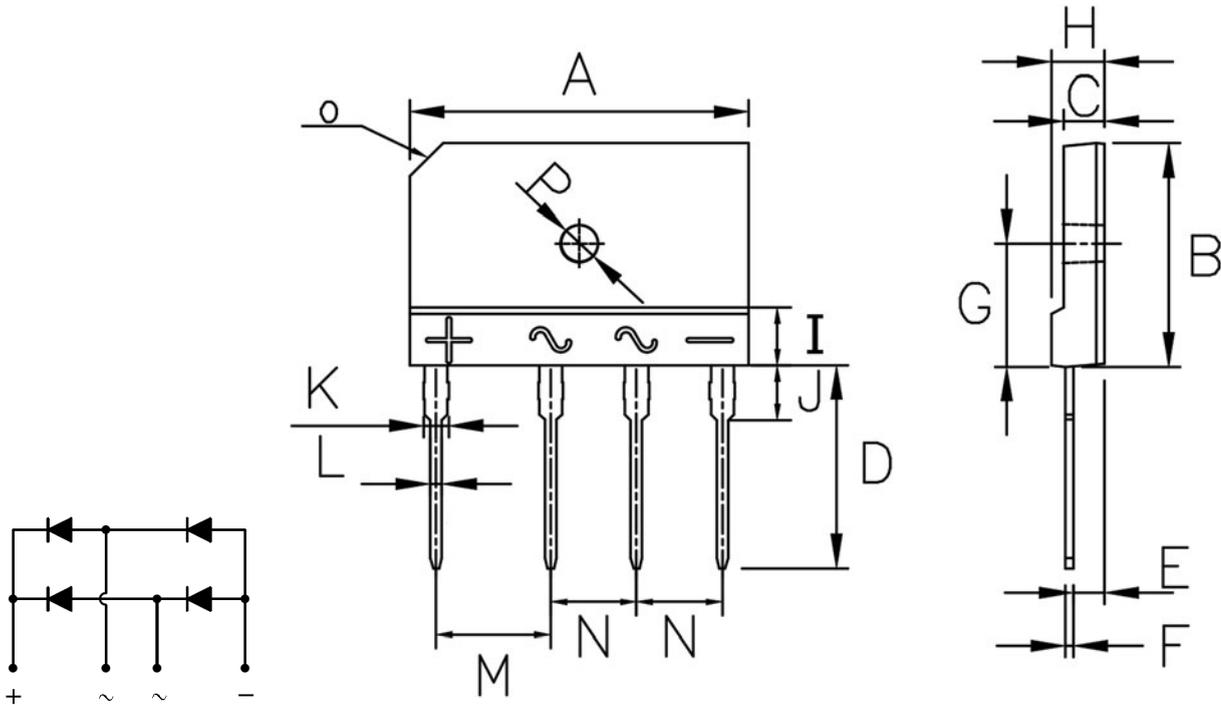


Fig.5 Typical Reverse Characteristics



Package Outline Information



GBJ mechanical data

UNIT		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
mm	max	30.30	20.30	3.80	18.00	2.90	0.80	7.90	4.80	5.80	4.20	2.40	1.15	10.20	7.70	C3.0	φ3.6
	min	29.70	19.70	3.40	17.00	2.50	0.55	7.40	4.40	4.80	3.80	2.00	0.90	9.80	7.30		φ3.0
mil	max	1193	799	150	709	114	31	311	189	228	165	94	45	402	303	C118	φ142
	min	1169	776	134	669	98	22	291	173	189	150	79	35	386	287		φ118

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
GBJ	250/BOX	2000	32X31X22	14.80	13.50