



### 35A Plug in Super Fast Recovery Bridge Rectifier

Reverse Voltage - 200 to 600 Volts

Forward Current - 35 Amperes

#### FEATURES

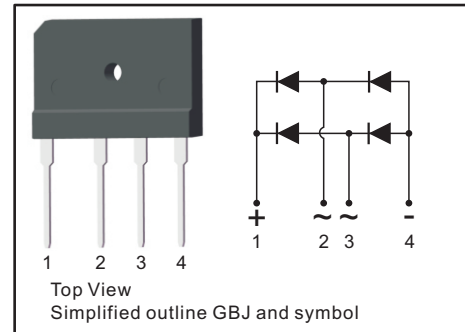
- Glass Passivated Chip Junction
- Super fast reverse recovery time
- Thin single in-line package
- High surge current capability

#### MECHANICAL DATA

- Package: GBJ
- Epoxy meets UL 94V-0 flammability rating
- Terminals: Pure tin plated leads
- Polarity: As marked on body
- Weight : 6.79 g(0.24oz)

#### PINNING

PIN	DESCRIPTION
1	Output Anode ( + )
2	Input Pin ( ~ )
3	Input Pin ( ~ )
4	Output Cathode ( - )



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

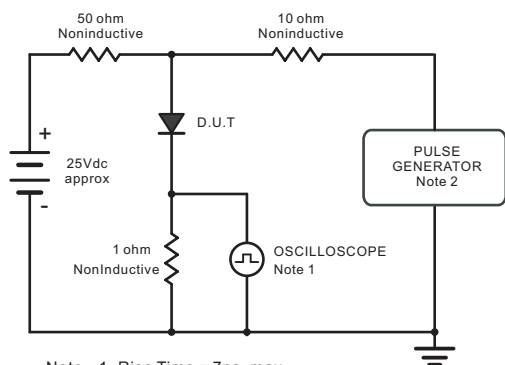
Parameter	Symbols	EGBJ3502	EGBJ3504	EGBJ3506	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	200	400	600	V
Maximum RMS voltage	$V_{RMS}$	140	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	200	400	600	V
Average Rectified Output Current With heat sink $T_c=125^\circ\text{C}$	$I_o$	35			A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	180			A
Maximum Forward Voltage at 17.5 A	$V_F$	1.0	1.30	1.70	V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 125^\circ\text{C}$	$I_R$	10 500			$\mu\text{A}$
Typical Junction Capacitance at $V_R=4\text{V}$ , $f=1\text{MHz}$	$C_j$	140			pF
Maximum Reverse Recovery Time <sup>(1)</sup>	$t_{rr}$	35			ns
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150			$^\circ\text{C}$

(1) Measured with  $I_F = 0.5\text{A}$ ,  $I_R = 1\text{A}$ ,  $I_{RR} = 0.25\text{A}$ .



Typical characteristic curve

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram



Note: 1. Rise Time = 7ns, max.  
Input Impedance = 1megohm, 22pF.  
2. Rises Time = 10ns, max.  
Source Impedance = 50 ohms.

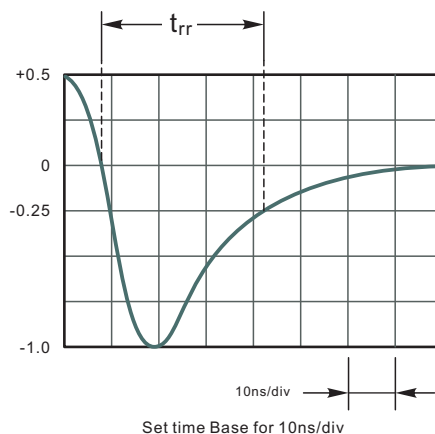


Fig.2 Maximum Average Forward Current Rating

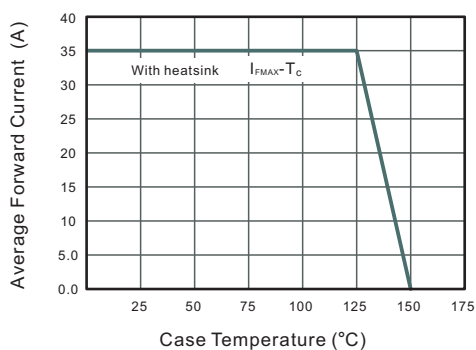


Fig.3 Typical Reverse Characteristics

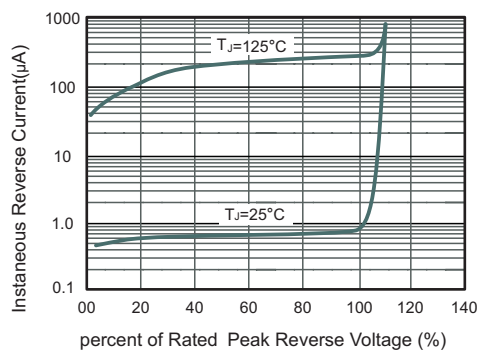


Fig.4 Typical Forward Characteristics

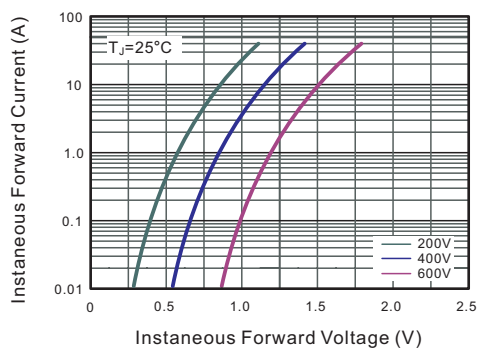


Fig.5 Typical Junction Capacitance

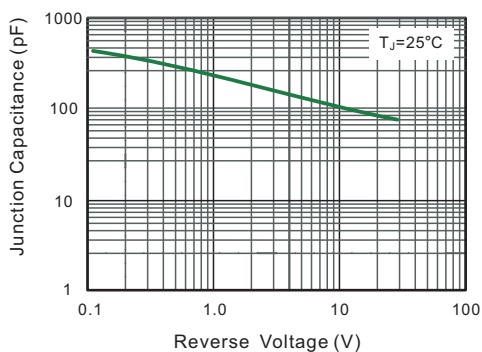
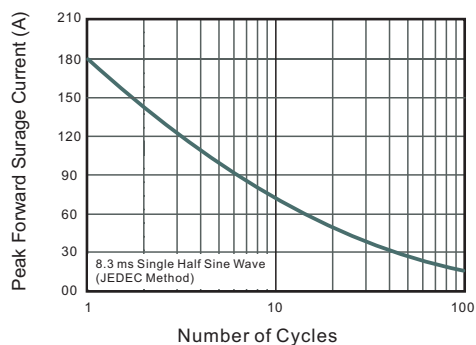
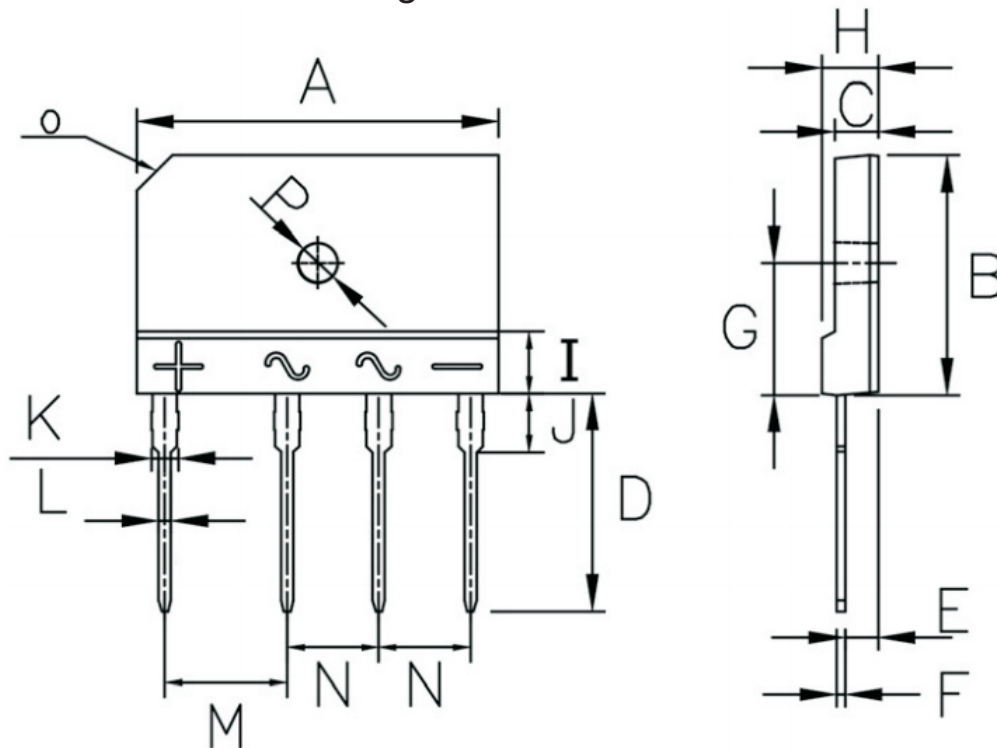


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current





GBJ Package Outline Dimensions



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	11.2	4.80	5.80	4.20	2.40	1.15	10.20	7.70	C3.0	$\phi 3.6$
	min	29.70	19.70	3.40	17.00	2.50	0.55	10.8	4.40	4.80	3.80	2.00	0.90	9.80	7.30		$\phi 3.0$
mil	max	1193	799	150	709	114	31	441	189	228	165	94	45	402	303	C118	$\phi 142$
	min	1169	776	134	669	98	22	425	173	189	150	79	35	386	287		$\phi 118$