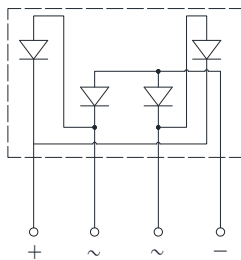
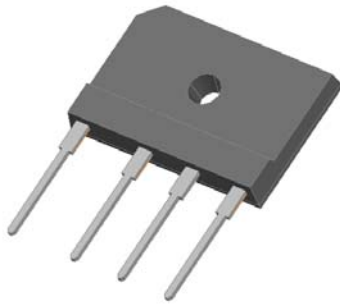


Super Fast Recovery Bridge Rectifiers



Features

- UL recognition, file #E230084
- Glass passivated chip junction
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for monitor, TV, printer, power supply, switching mode power supply, adapter, audio equipment, and home appliances applications.

Mechanical Data

- **Package:** 6KBJ
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■Maximum Ratings (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	EGBJ3506	
Device marking code			EGBJ3506	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	600	
Maximum RMS Voltage	V _{RMS}	V	420	
Maximum DC blocking Voltage	V _{DC}	V	600	
Average rectified output current @60Hz sine wave, R-load	With heatsink T _c =100°C	I _o	A	35.0
	Without heatsink T _a =25°C			3.2
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _j =25°C	I _{FSM}	A	350	
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25°C			700	
Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² S	508	
Storage temperature	T _{stg}	°C	-55 ~ +150	
Junction temperature	T _j	°C	-55 ~ +150	
Dielectric strength @ Terminals to case, AC 1 minute	V _{dis}	KV	2.5	
Mounting torque @Recommend torque: 5kg·cm	T _{or}	kg·cm	8	



EGBJ3506

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	EGBJ3506
Maximum reverse recovery time	T _{RR}	ns	I _F =0.5A, I _R =1.0A, I _{RR} =0.25A	50
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =17.5A	2.0
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C	5
			T _j =125°C	100
Typical junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	175

■Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	EGBJ3506
Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W	18.0
	Between junction and case, With heatsink	R _{θJ-C}		1.0

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
EGBJ3506	B1	Approximate 6.5	15	750	1500	TUBE

■ Characteristics (Typical)

FIG1:I_o-T_c Curve

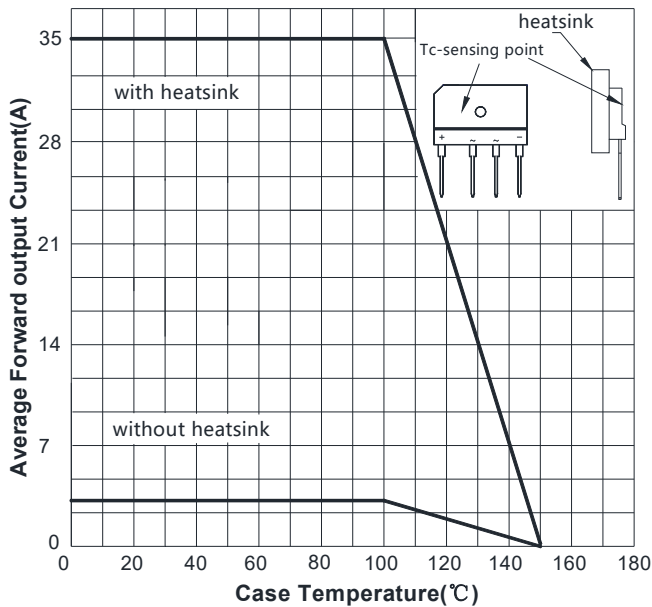
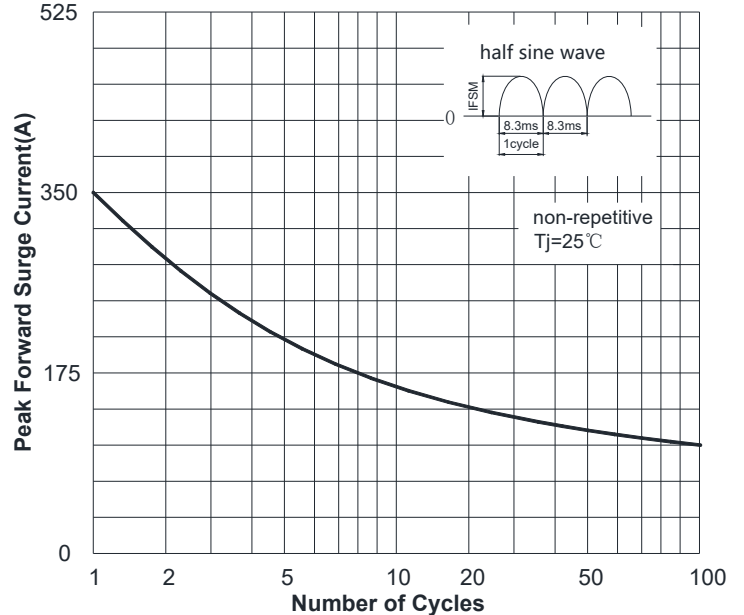


FIG2: Surge Forward Current Capability



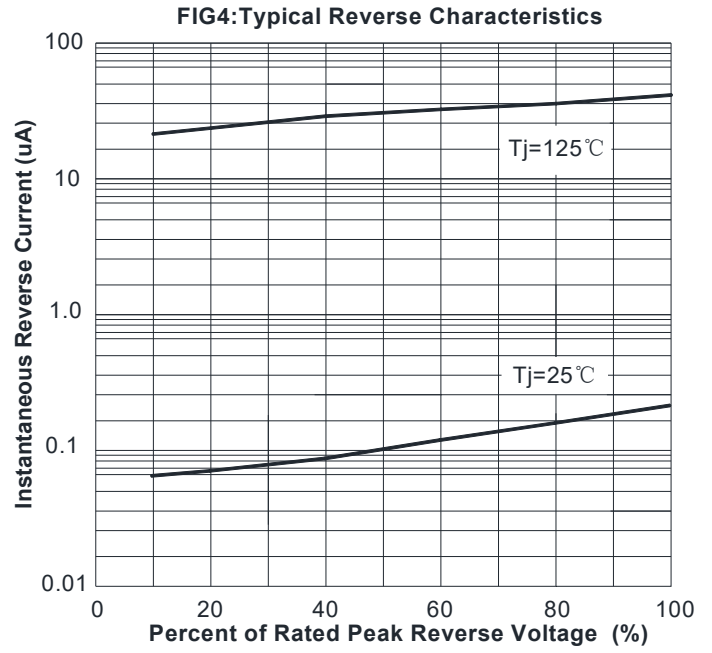
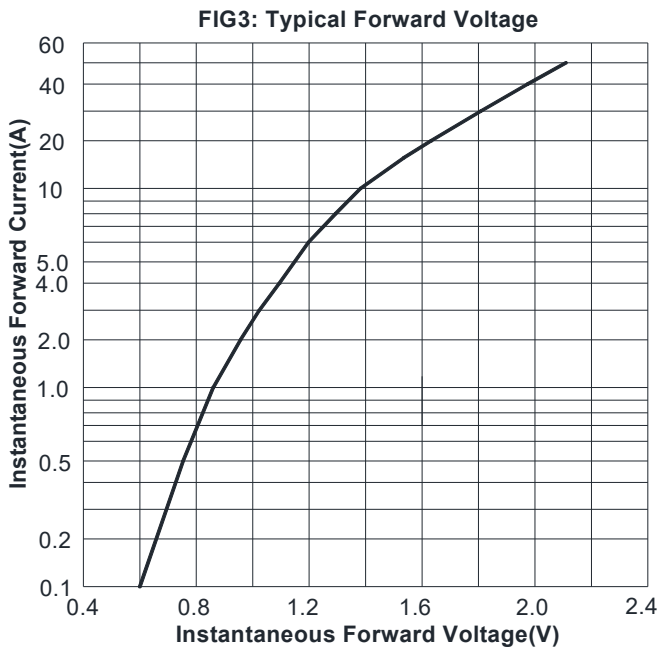
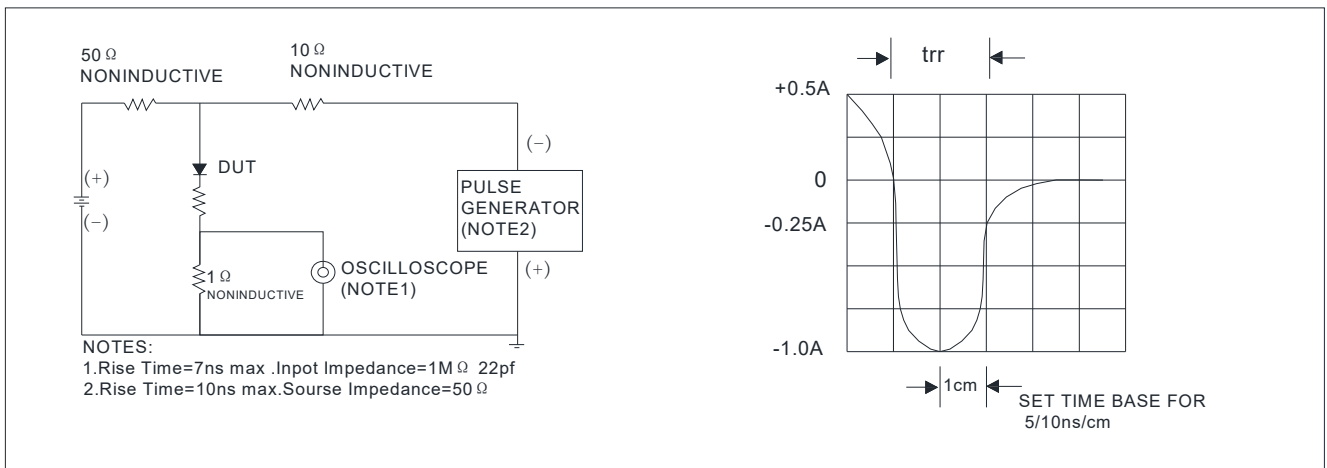


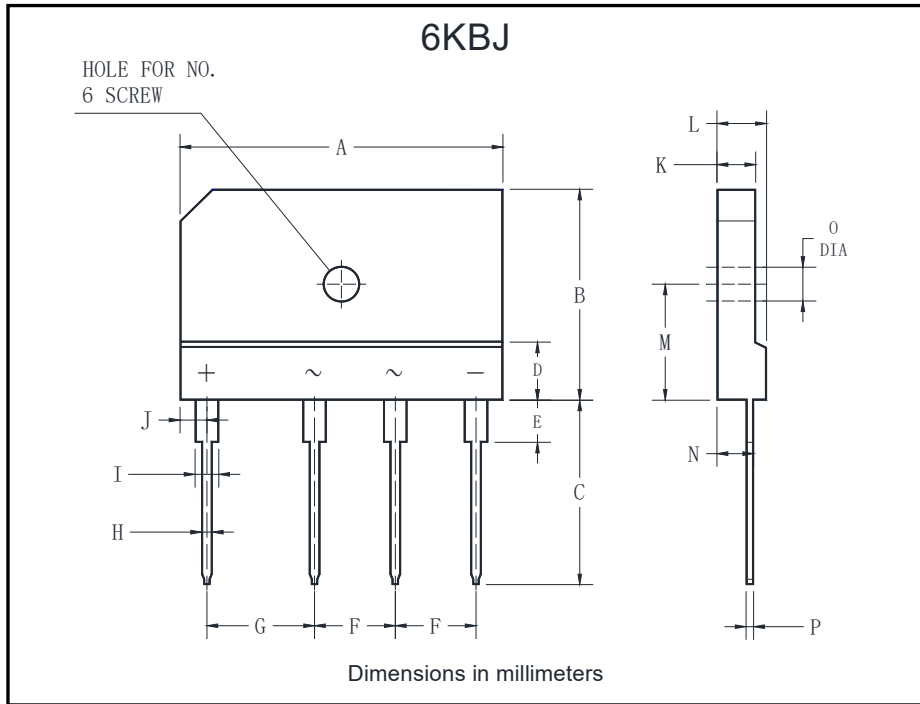
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time





EGBJ3506

■ Outline Dimensions



6KBJ		
Dim	Min	Max
A	29.7	30.3
B	19.7	20.3
C	17.0	18.0
D	4.8	5.8
E	3.8	4.2
F	7.3	7.7
G	9.8	10.2
H	0.9	1.1
I	2.0	2.4
J	2.3	2.7
K	3.4	3.8
L	4.4	4.8
M	10.8	11.2
N	3.1	3.7
O	3.1	3.4
P	0.6	0.8



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