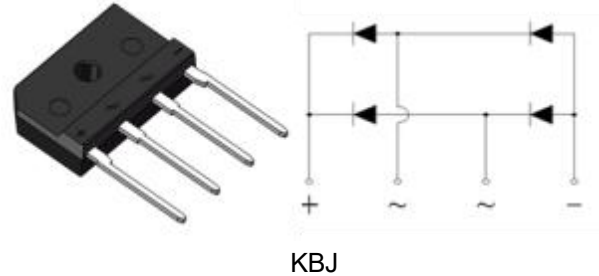


Reverse Voltage 50~1000V

Output Current 4A

Features

- Thin Single In-Line package;
- Ideal for printed circuit boards;
- Glass Passivated chip junction;
- High Surge current capability;
- High case dielectric strength of 2000 VRMS ;
- Plastic package has Underwrites Laboratory Flammability Classification 94V-0;



Typical Applications

- General purpose use in AC-to-DC bridge full wave rectification for Switching Power Supply, Home Appliances, Office Equipment, Industrial Automation applications.

Mechanical Data

- Case: KBJ(3S)Molded plastic body; Base P/N with suffix"E" on packing code-halogen free;
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026;
- High temperature soldering guaranteed: Solder Dip 260°C, 10seconds;
- Polarity: As marked on body;
- Mounting Torgue: 10cm·kg (8.8 inches·lbs) max;
- Recommend Torgue: Mounting Torgue: 5.7cm·kg (5inches·lbs);

Maximum Ratings (TA = 25 °C unless otherwise noted)									
Parameter	Symbol	KBJ4AV	KBJ4BV	KBJ4DV	KBJ4GV	KBJ4JV	KBJ4KV	KBJ4MV	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
Maximum average forward rectified output current at	$T_C=100^{\circ}C$	4 ⁽¹⁾							A
	$T_A=25^{\circ}C$	2.3 ⁽²⁾							
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	150							A
Rating for fusing($t<8.3ms$)	I^2t	94							A ² sec
Operating junction and storage temperature range	T_J, T_{STG}	- 55 to + 150							°C

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

Parameter	Symbol	KBJ4AV	KBJ4BV	KBJ4DV	KBJ4GV	KBJ4JV	KBJ4KV	KBJ4MV	Unit
Maximum instantaneous forward voltage drop per leg at 2A	V_F				1.00				Volts
Maximum DC reverse at rated DC blocking voltage per leg	TA=25°C				5.0				μA
	TA=125°C				250				
Typical thermal resistance per leg	$R_{\theta JA}^{(2)}$				26				°C/W
	$R_{\theta JC}^{(1)}$				5				

1). Unit case mounted on Al plate heatsink;

2). Units mounted on PCB without 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 Curves

(TA = 25 °C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

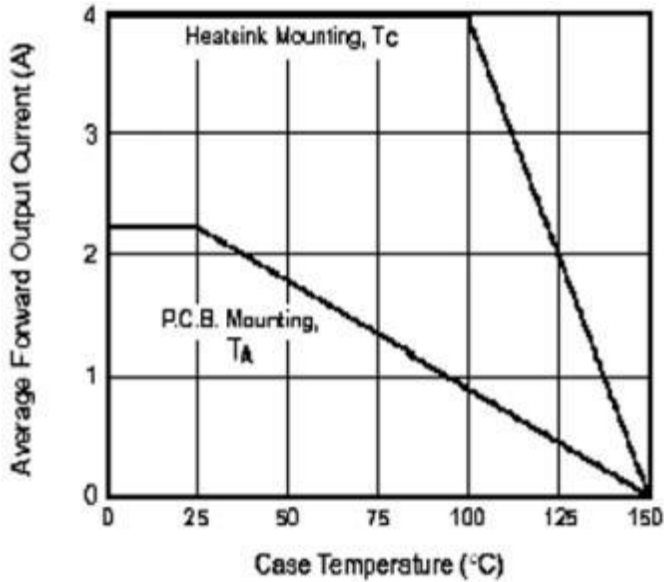


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

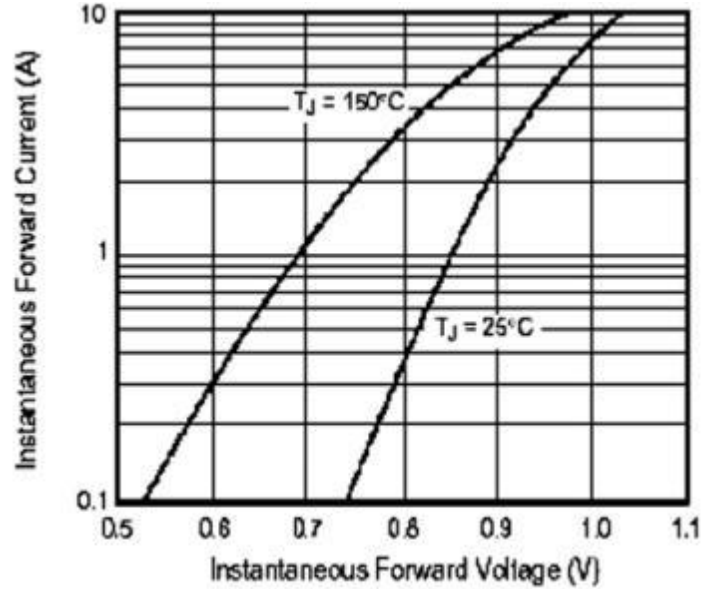


FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

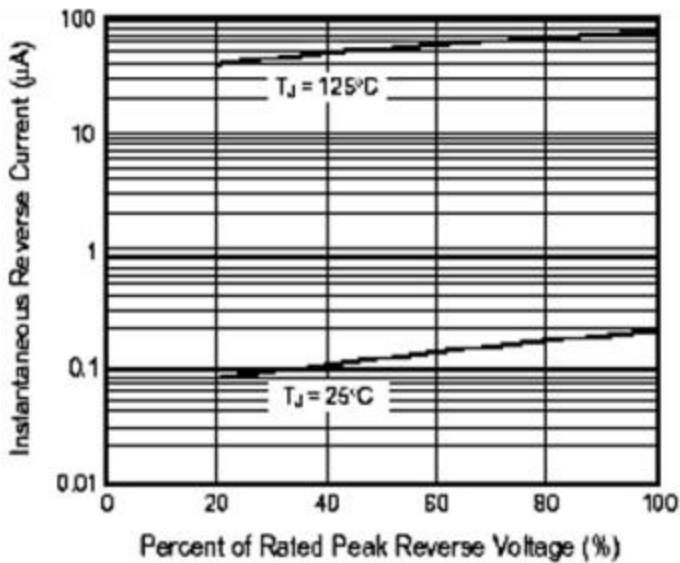
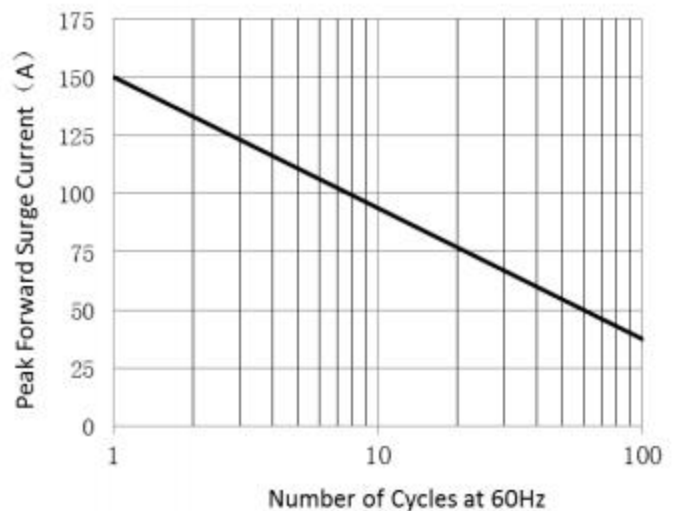


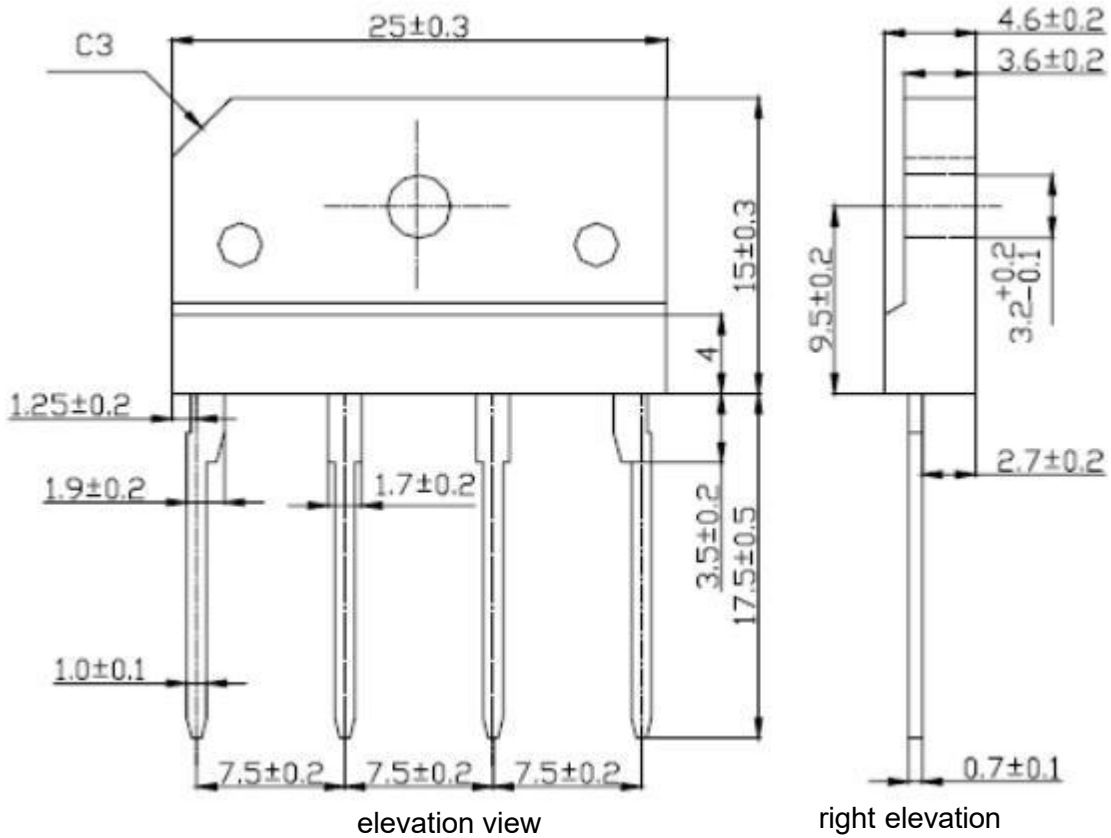
FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



Package Outline Dimensions

in millimeters

First angle projection



Revision History

Document Version	Date of release	Discription of changes
Rev.A	2021/3/1	Released Datasheet
Rev.B	2023/12/8	Modify document format

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