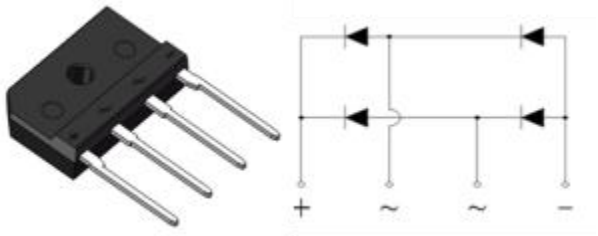
Reverse Voltage50~1000V Output Current 6A

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;



KBJ

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	KBJ6A	KBJ6B	KBJ6D	KBJ6G	KBJ6J	KBJ6K	KBJ6M	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°C	$I_{F(AV)}$	6							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	180							A
Rating for fusing(t<8.3ms)	I^2t	135							A^2sec
Operating junction and storage temperature range	T_J, T_{STG}	- 55 to + 150							°C

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

Parameter		Symbol	KBJ6A	KBJ6B	KBJ6D	KBJ6G	KBJ6J	KBJ6K	KBJ6M	Unit
Maximum instantaneous forward voltage drop per leg at 3A		V_F	1.00							Volts
Maximum DC reverse at rated DC blocking voltage per leg	TA=25°C	I_R	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

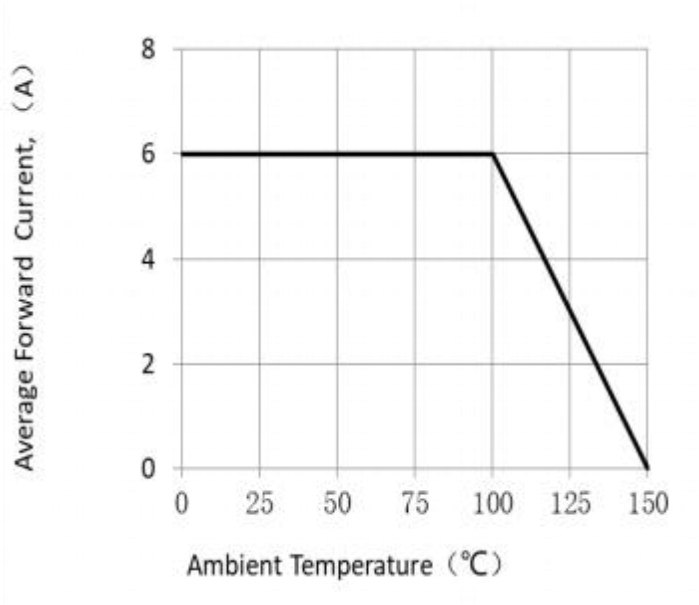


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS

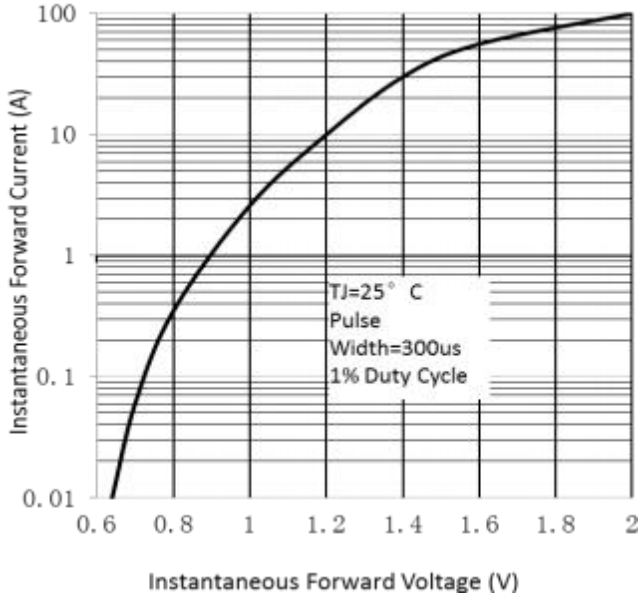


FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

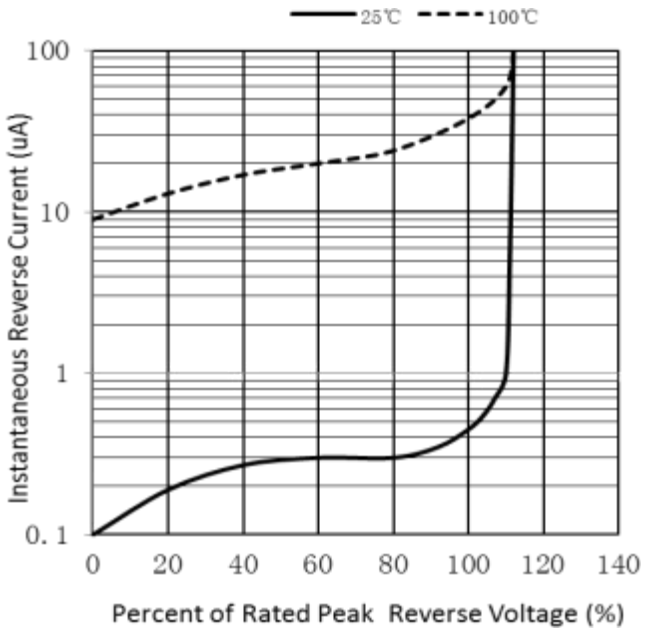
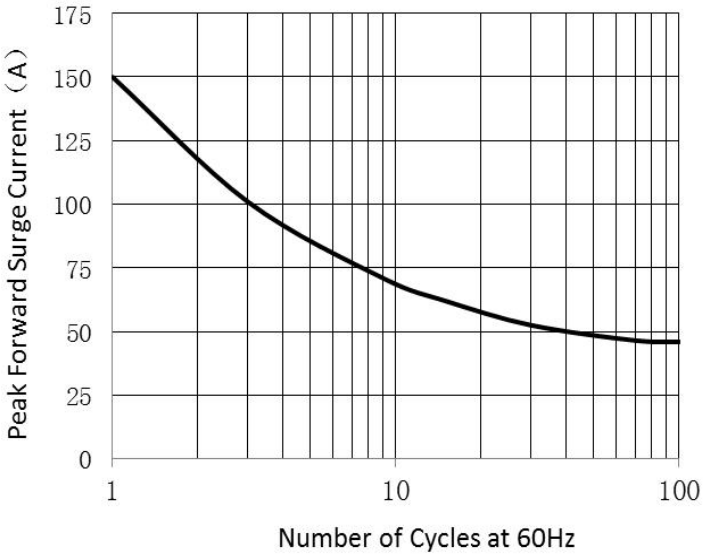


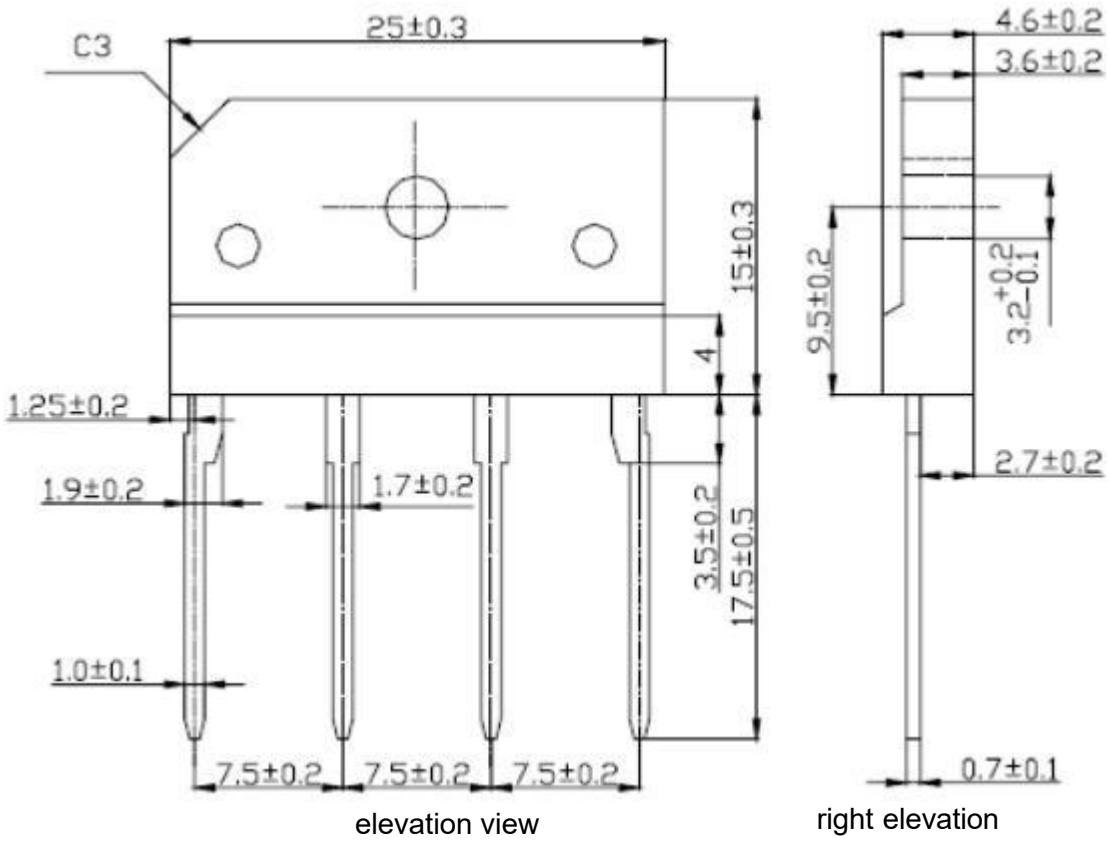
FIG.4-MAXIMUM NON-REPETITEVE PEAK FORWARD SUGER CURRENT



Package Outline Dimensions

in millimeters

First angle projection



elevation view

right elevation

Revision History

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

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