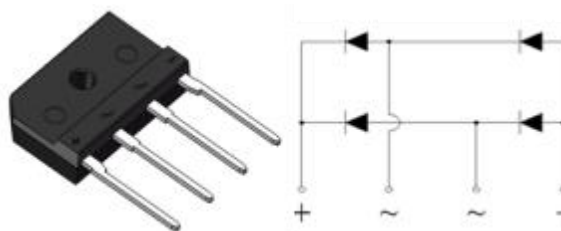


Reverse Voltage 50~1000V

Output Current 10A

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 V_{RMS};
- 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 Torque: 10cm·kg (8.8 inches·lbs) max;
- Recommend Torque: Mounting Torque: 5.7cm·kg (5inches·lbs);

Maximum Ratings (TA = 25 °C unless otherwise noted)									
Parameter	Symbol	KBJ10AU	KBJ10BU	KBJ10DU	KBJ10GU	KBJ10JU	KBJ10KU	KBJ10MU	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)}	10 ⁽¹⁾						A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	200						A	
Rating for fusing(t<8.3ms)	I ² t	167						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	KBJ10AU	KBJ10BU	KBJ10DU	KBJ10GU	KBJ10JU	KBJ10KU	KBJ10MU	Unit
Maximum instantaneous forward voltage drop per leg at 5A	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				

Notes: 1. Unit case mounted on 14*14*0.15 cm thick AL plate heatsink

2. Units mounted in free air, no heatsink on P.C.B. with 0.5*0.5" (12.7*12.7mm) copper pads and 0.375"(9.5mm) lead length

3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screws

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

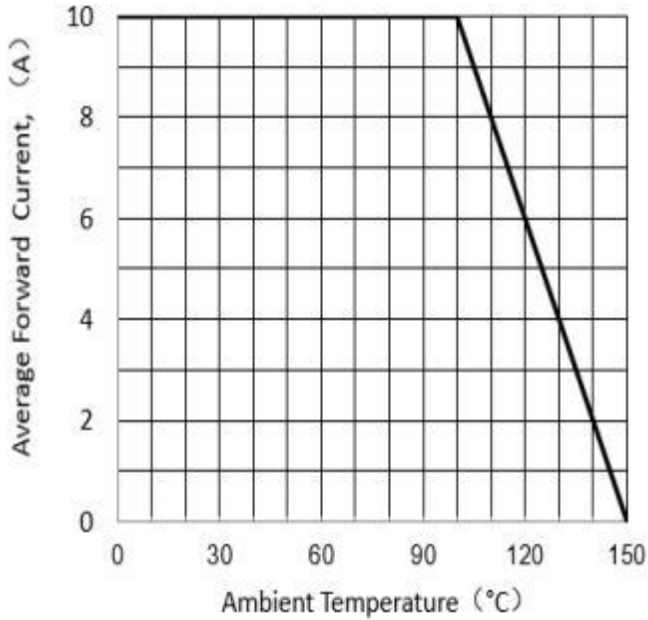


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

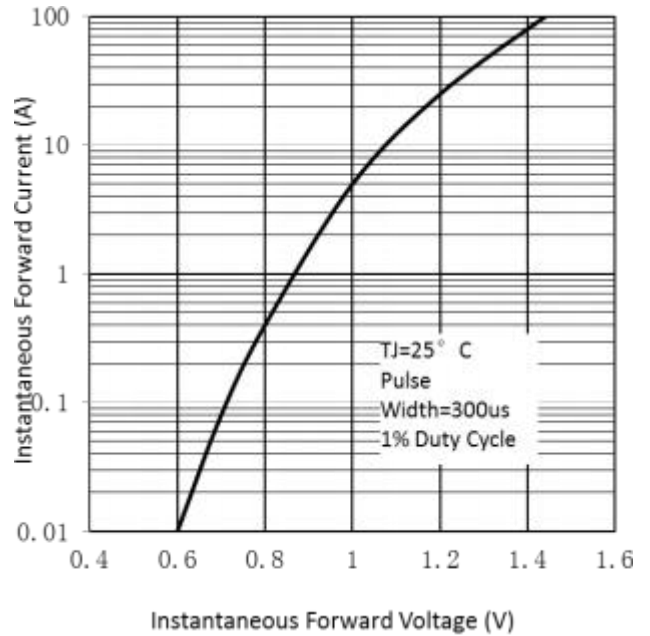


FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

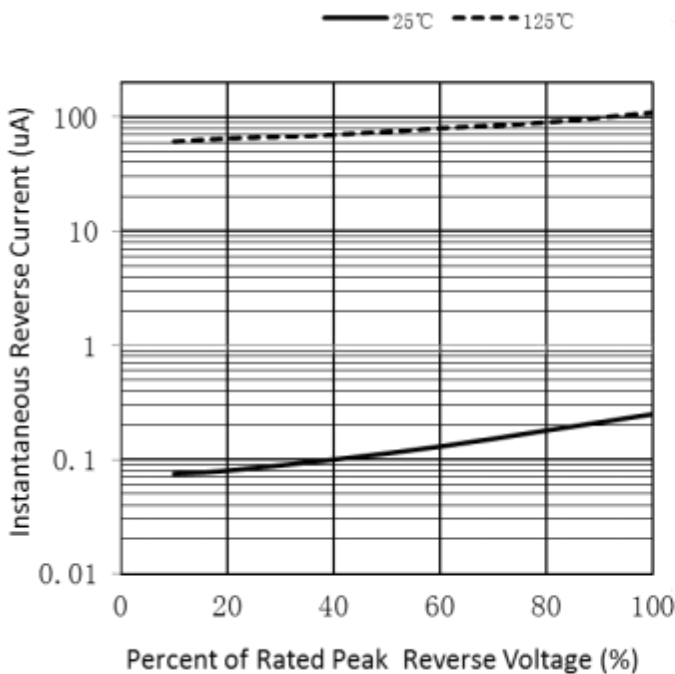
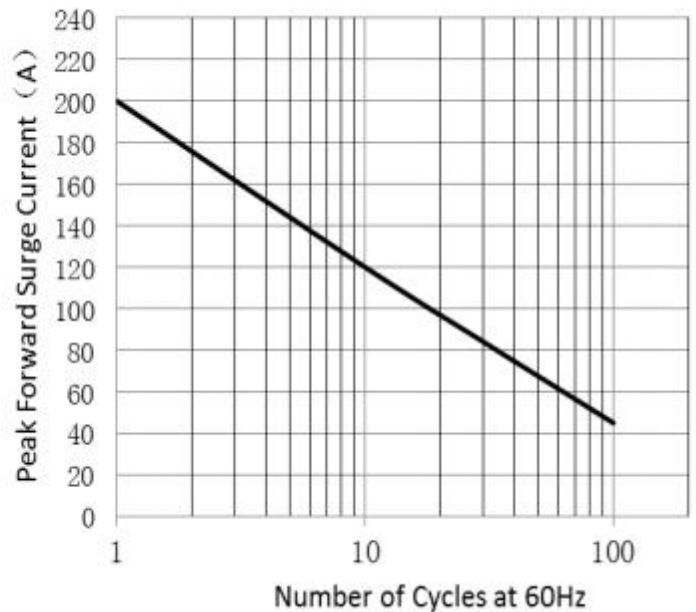
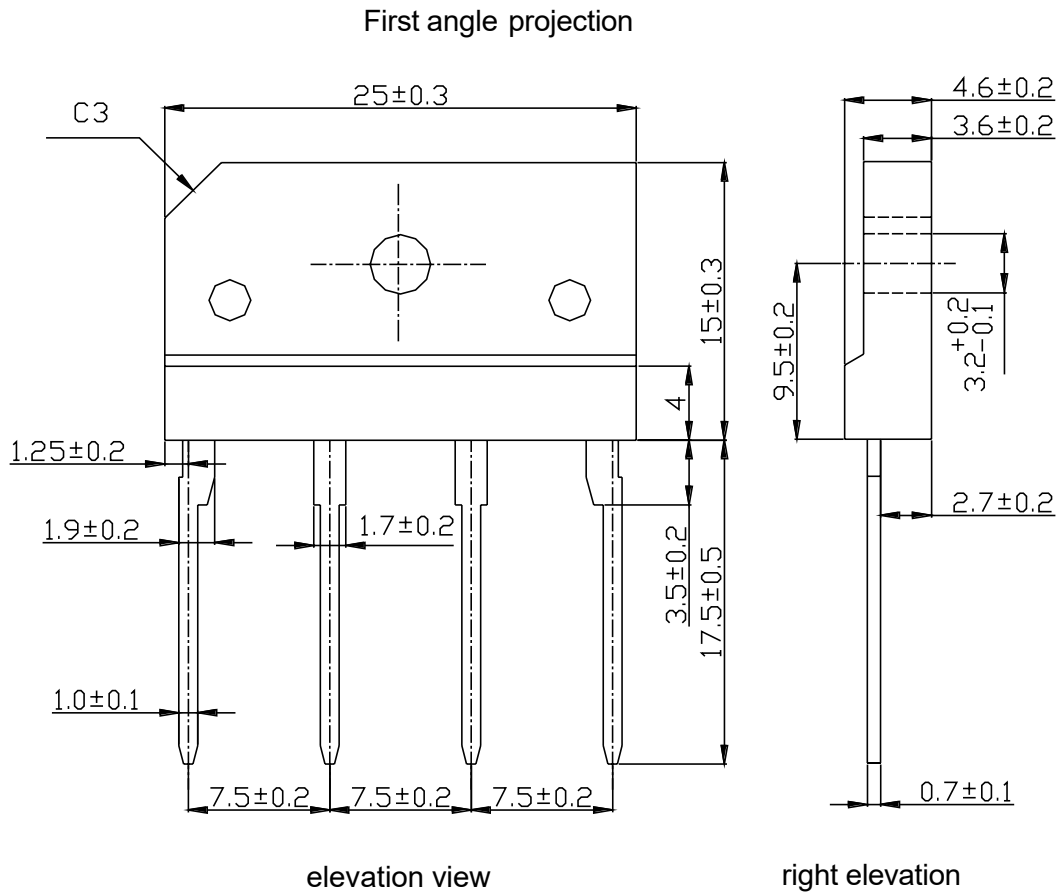


FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



Package Outline Dimensions

in millimeters



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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