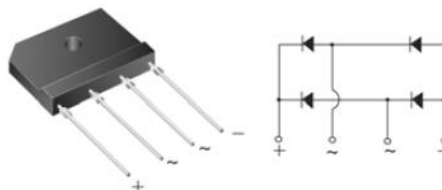


KBJ4AU thru KBJ4MU

4A Glass Passivated Single-Phase Bridge Rectifiers

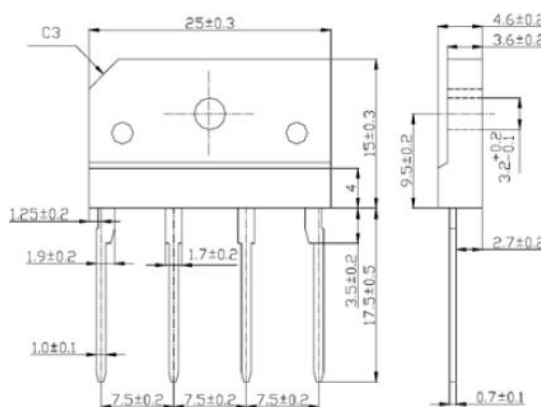
Features

- Ideal for printed circuit boards
- Glass passivated chip junction
- High surge current capability
- High case dielectric strength of 2000 V_{RMS}
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0



Mechanical Data

- Cases : KBJ(3S) Epoxy meets UL-94V-0 Flammability rating
- Terminals : Plated leads solderable per MIL-STD-750, method 2026
- High temperature soldering : 260°C/10 seconds, 0.375(9.5mm) lead length 5lbs.(2.3kg) tension
- Polarity : As marked on body
- Mounting Torque : 10cm-kg (8.8 inches-lbs) max.
- Recommended Torque : 5.7cm-kg (5 inches-lbs)



Package outline dimensions in millimeters

Typical Applications

General purpose use in ac-to-dc bridge full wave rectification for Monitor, TV, Printer, Switching Mode Power Supply, Adapter, Audio Equipment, and Home Appliances applications

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Symbol	Parameter	KBJ4AU	KBJ4BU	KBJ4DU	KBJ4GU	KBJ4JU	KBJ4KU	KBJ4MU	Unit
V _{RRM}	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V
V _{RMS}	Maximum RMS Voltage	35	70	140	280	420	560	700	V
V _{DC}	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
I _{F(AV)}	Maximum Average Forward Rectified Current	@ T _C =100°C			4.0 ⁽¹⁾				A
		@ T _A =25°C			2.3 ⁽²⁾				
I _{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)				120				A
I ² t	Rating for Fusing (t<8.3ms)				60				A ² sec
V _F	Maximum Instantaneous Forward Voltage @ I _F =2.0A				1.0				V
I _R	Maximum DC Reverse Current at rated DC Blocking Voltage	@ T _A =25°C			5				µA
		@ T _A =125°C			250				
R _{θJA} R _{θJL}	Typical Thermal Resistance (Note 1)				26 ⁽²⁾ 5 ⁽¹⁾				°C/W
V _{ISO}	Dielectric strength (Terminals to case, AC 1 minute)				2000				V
T _J , T _{STG}	Operating Junction and Storage Temperature Range				-55 to +150				°C

Notes : 1. Unit case mounted on 6.3x6.3x0.15cm thick Al plate heatsink
 2. Units mounted on P.C.B. with 0.5 x 0.5" (13 x 13 mm) 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 #6 screw

Rating and Characteristic Curves

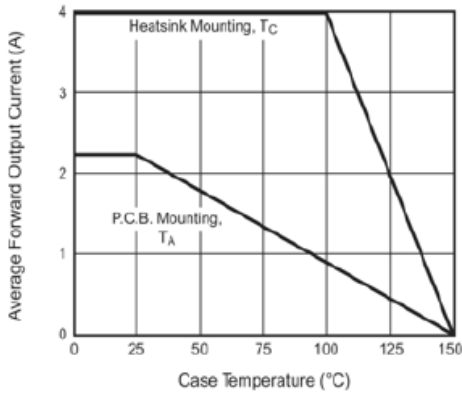


Figure 1. Derating Curve Output Rectified Current

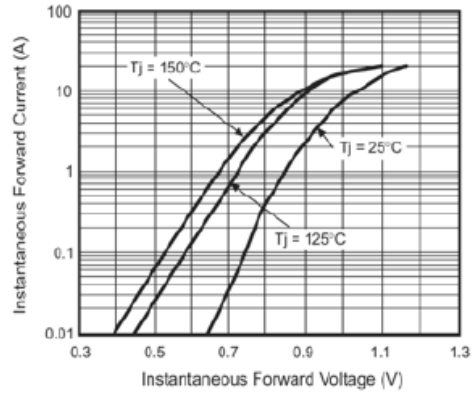


Figure 3. Typical Instantaneous Forward Characteristics Per Leg

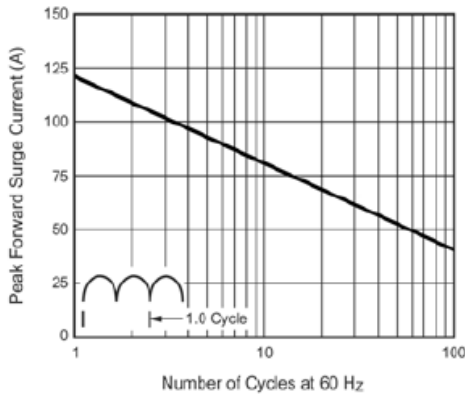


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

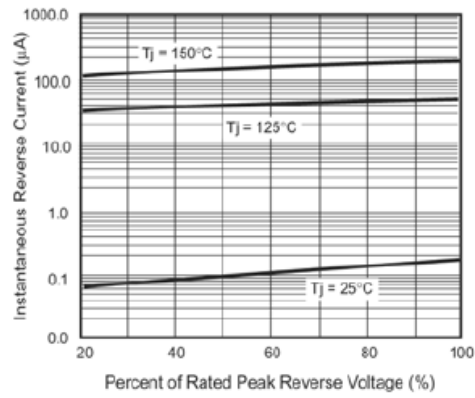


Figure 4. Typical Reverse Characteristics Per Leg

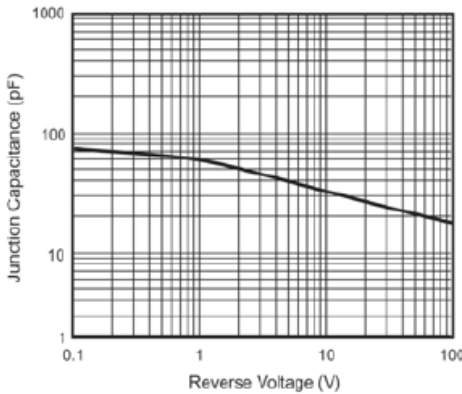


Figure 5. Typical Junction Capacitance Per Leg

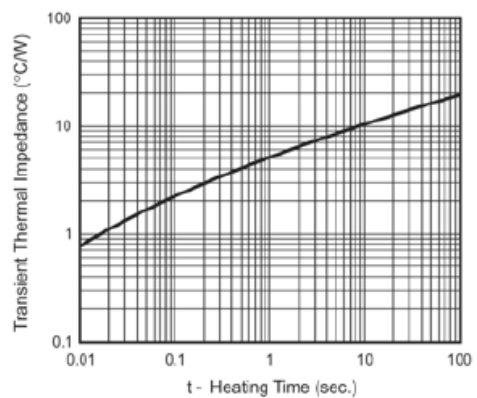


Figure 6. Typical Transient Thermal Impedance Per Leg