

## Glass Passivated Low Profile Bridge Rectifier

**Voltage**

**600 V**

**Current**

**10A**

### Features

- Glass passivated chip junction
- Thin single in-line package
- High surge current capability



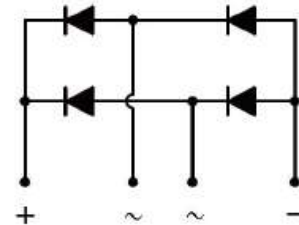
### Mechanical Data

- Case : KBJB Package
- Molding compound meets UL 94 V-0 flammability Rating, RoHS-compliant, Halogen free
- Terminals : Tin plated leads , Solderable per J-STD-002 and JESD22-B102
- Approx. Weight : 2.5519 grams

### Application

- Slim Adapter Power
- Game Console Power
- TV Power

## KBJB



Key Parameters	
Parameter	Value
$V_{RRM}$	<b>600V</b>
$I_F(AV)$	<b>10A</b>
$I_{FSM}$	<b>220A</b>
$I_R$	<b>5uA</b>
$T_J \text{ max.}$	<b>150°C</b>
Package	<b>KBJB</b>

**Maximum Ratings and Thermal Characteristics** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage		$V_{RRM}$	600	V
Maximum RMS Voltage		$V_{RMS}$	420	V
Maximum DC Blocking Voltage		$V_{DC}$	600	V
Maximum Average Forward Current	With heatsink	$I_{F(AV)}$	10	A
	Without heatsink		3.2	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25^\circ\text{C}$	$I_{FSM}$	220	A
	@ $T_A = 125^\circ\text{C}$		176	
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25^\circ\text{C}$	$I_{FSM}$	440	A
	@ $T_A = 125^\circ\text{C}$		352	
$I^2 t$ rating for fusing ( $t = 8.3\text{ms}$ )		$I^2 t$	200.9	$\text{A}^2\text{S}$
Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4\text{ V}$		$C_J$	70	pF
Typical Thermal Resistance (Note1)		$R_{\theta JA}$	13	$^\circ\text{C/W}$
		$R_{\theta JL}$	5	
		$R_{\theta JC}$	2	
Operating junction and storage temperature range		$T_J, T_{STG}$	-55~150	$^\circ\text{C}$
Mounting torque @ Recommend torque:5Kg.cm		Tor	8	Kg.cm

**Electrical Characteristics** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 5\text{ A}, T_J = 25^\circ\text{C}$	-	-	1.0	V
Reverse Current	$I_R$	$V_R = 600\text{ V}, T_J = 25^\circ\text{C}$	-	-	5	$\mu\text{A}$
		$V_R = 600\text{ V}, T_J = 125^\circ\text{C}$	-	-	100	

NOTES :

1. Device mounted on 75mm \* 45mm \* 5.5mm Aluminum Plate Heatsink.

TYPICAL CHARACTERISTIC CURVES

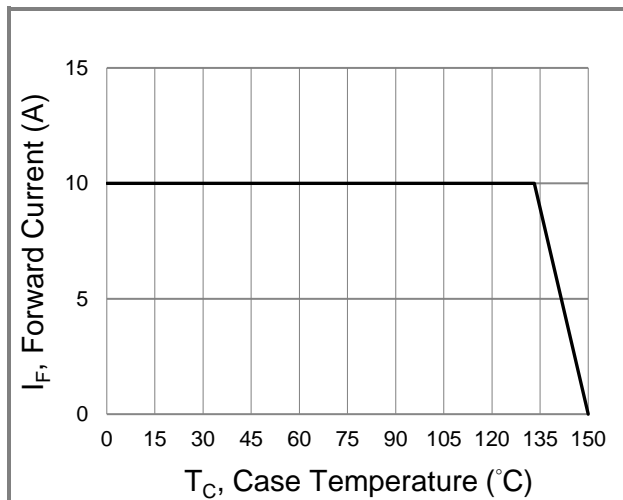


Fig.1 Forward Current Derating Curve

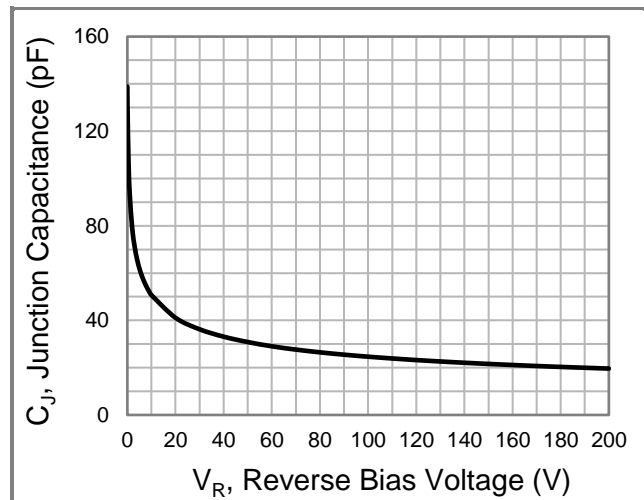


Fig.2 Typical Junction Capacitance

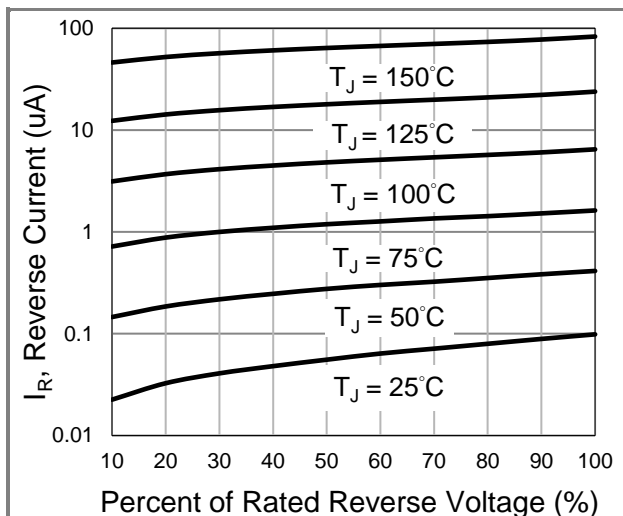


Fig.3 Typical Reverse Characteristics

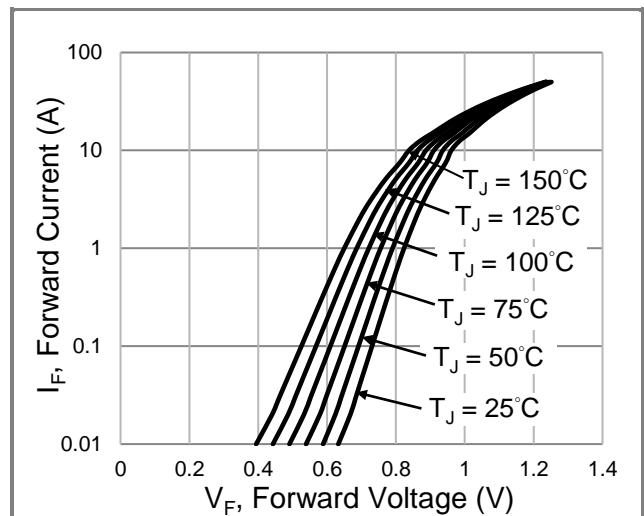
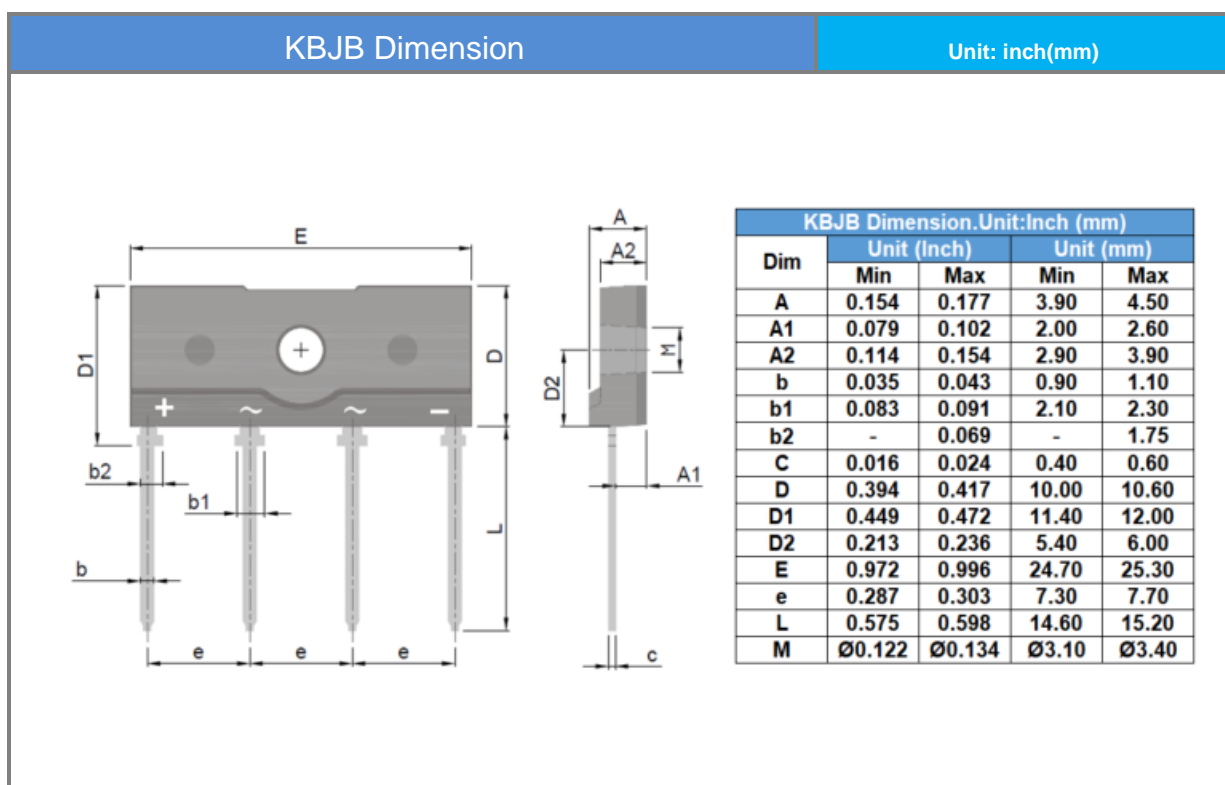


Fig.4 Typical Forward Characteristics

## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
KBJB1006	KBJB	20 pcs / tube	KBJB1006

## Packaging Information



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