

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



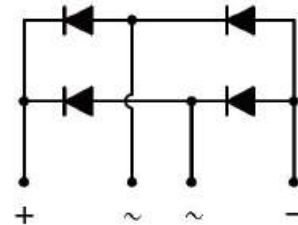
Mechanical Data

- 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}	600V
$I_F(AV)$	10A
I_{FSM}	220A
I_R	5uA
$T_J \text{ max.}$	150°C
Package	KBJB

Maximum Ratings and Thermal Characteristics ($T_A = 25\text{ }^\circ\text{C}$ 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	@ $T_A = 25\text{ }^\circ\text{C}$	I_{FSM}	220	A
	@ $T_A = 125\text{ }^\circ\text{C}$		176	
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$	I_{FSM}	440	A
	@ $T_A = 125\text{ }^\circ\text{C}$		352	
$I^2 t$ rating for fusing ($t = 8.3\text{ms}$)		$I^2 t$	200.9	A^2S
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 ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

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

NOTES :

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

TYPICAL CHARACTERISTIC CURVES

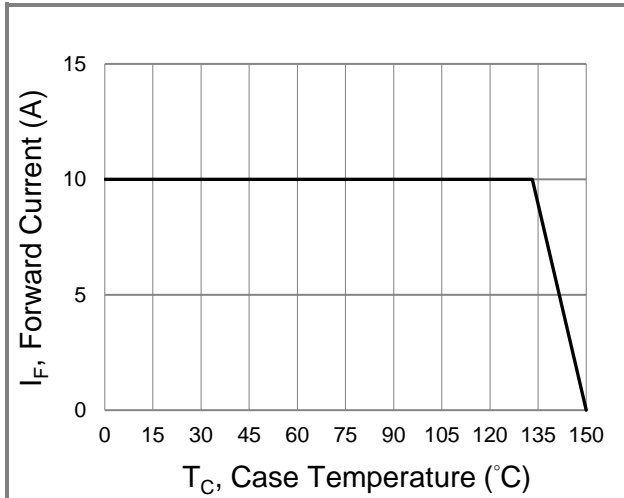


Fig.1 Forward Current Derating Curve

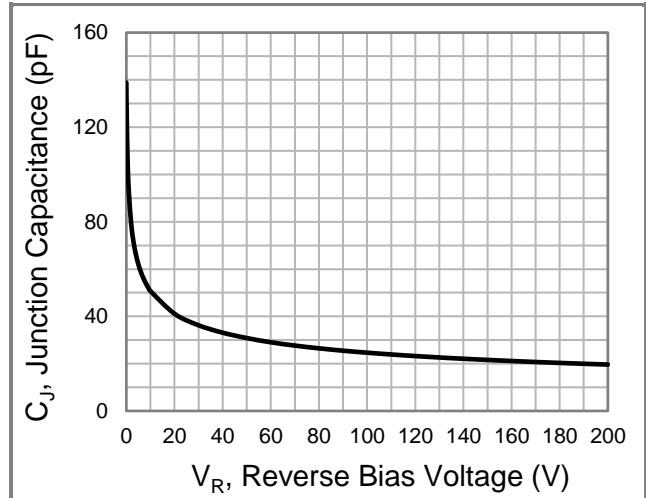


Fig.2 Typical Junction Capacitance

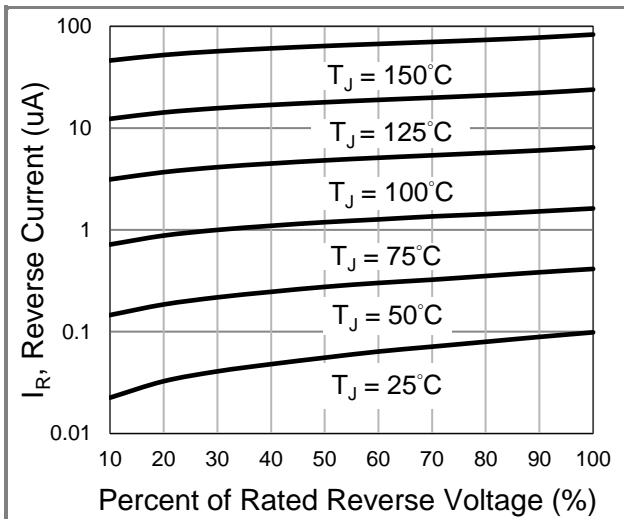


Fig.3 Typical Reverse Characteristics

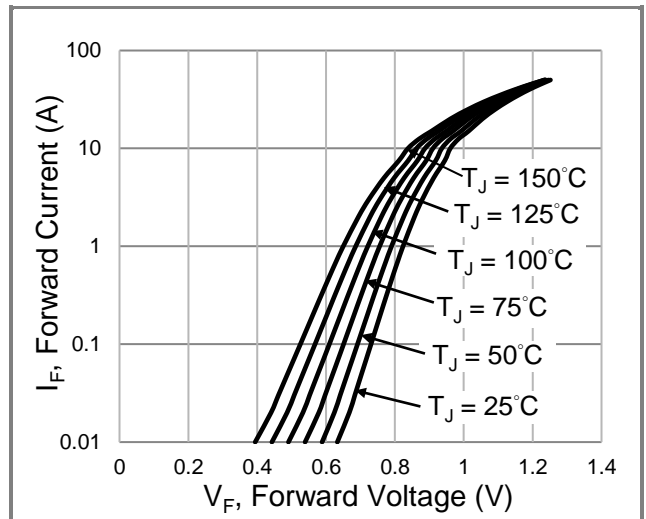
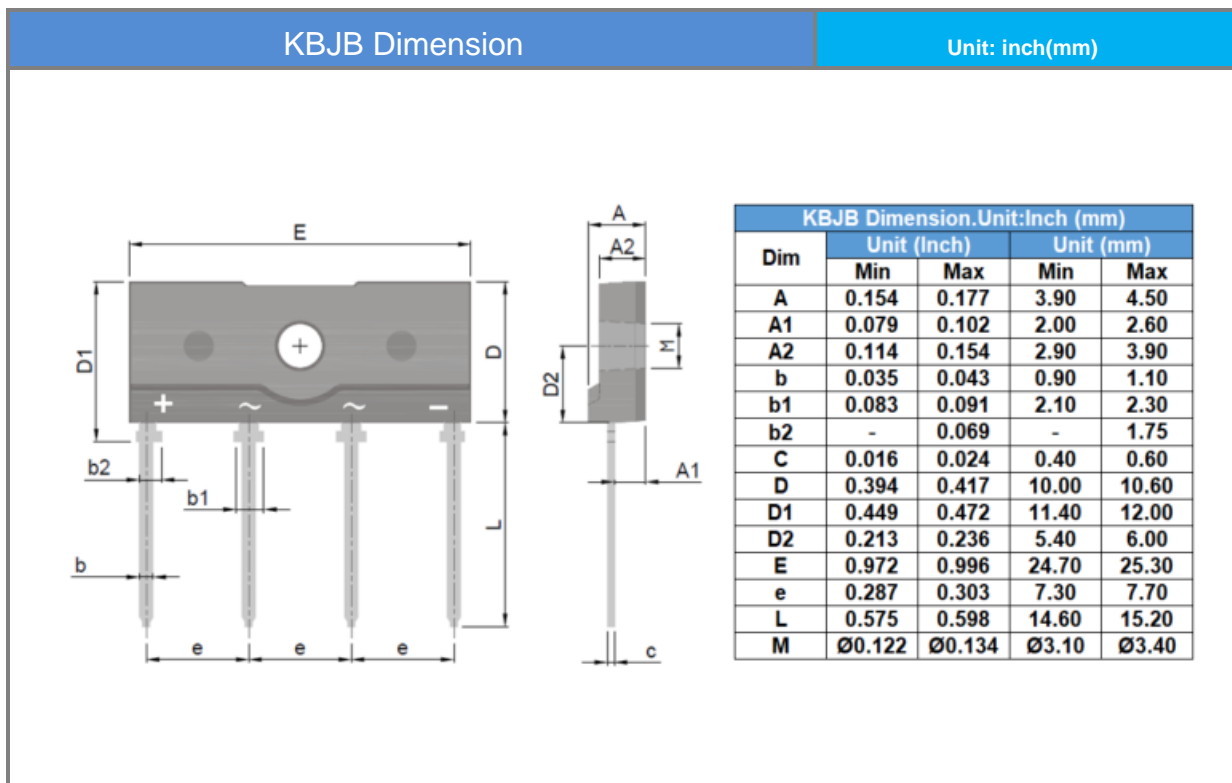


Fig.4 Typical Forward Characteristics

Product and Packing Information

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

Packaging Information



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