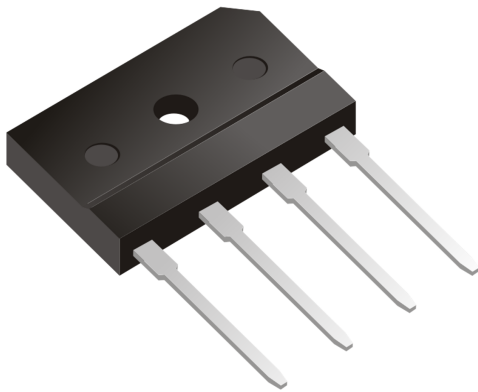


Reverse Voltage 1000 V

Forward Current 25.0 A

Features

- Ideal for printed circuit boards
- High surge current capability
- Solder dip 260 °C max. 10s, per JESD 22-B106

Mechanical Data

- **Package:** KBJ
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

Typical Applications

General purpose use in AC/DC bridge full wave rectification for monitor, TV, printer, power supply, switching mode power supply, adapter, audio equipment, and home appliances applications.

■ **Maximum Ratings** (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	KBJ 25005	KBJ 2501	KBJ 2502	KBJ 2504	KBJ 2506	KBJ 2508	KBJ 2510
Device marking code				KBJ 25005	KBJ 2501	KBJ 2502	KBJ 2504	KBJ 22506	KBJ 2508	KBJ 2510
Repetitive Peak Reverse Voltage		VRRM	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load,	With heatsink $T_c = 110^{\circ}\text{C}$	I _O	A	25.0						
	Without heatsink $T_a = 25^{\circ}\text{C}$			4.0						
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, $T_j = 25^{\circ}\text{C}$		I _{FSM}	A	300						
Current squared time @1ms≤t≤8.3ms $T_j = 25^{\circ}\text{C}$,rating of per diode		I ² t	A ² S	375						
Storage Temperature		T _{stg}	°C	-55 ~+150						
Junction Temperature		T _j	°C	-55 ~+150						
Dielectric strength @ terminals to case, AC 1 minute		V _{dis}	KV	2						
Mounting torque @recommend torque: 5kg • cm		Tor	kg • cm	8						

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBJ 25005	KBJ 2501	KBJ 2502	KBJ 2504	KBJ 2506	KBJ 2508	KBJ 2510
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =12.5A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =V _R RM	5						

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	KBJ 25005	KBJ 2501	KBJ 2502	KBJ 2504	KBJ 2506	KBJ 2508	KBJ 2510
Thermal Resistance	Between junction and ambient, Without heatsink	RθJ-A	°C/W	18.0						
	Between junction and case, With heatsink	RθJ-C		1.0						

■ **Characteristics Curves**

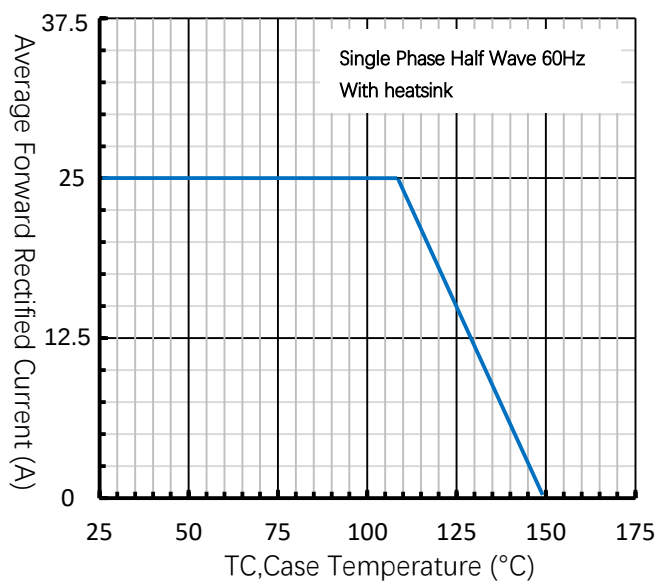


Fig.1 Forward Current Derating Curve

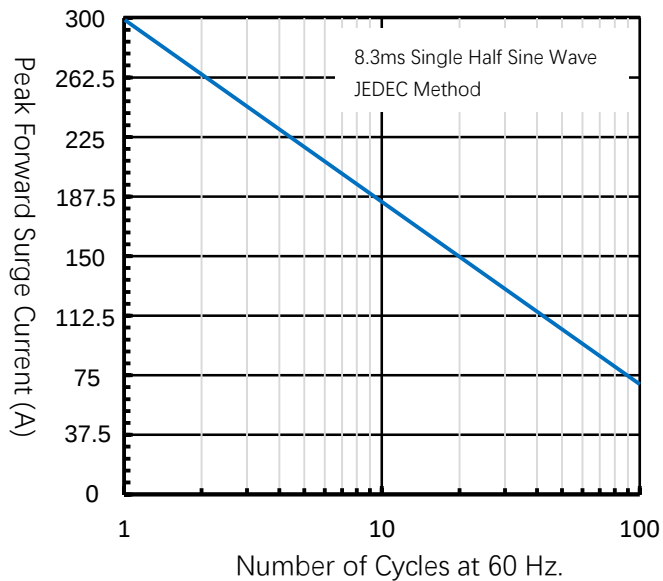


Fig.2 Forward Surge Current Capability

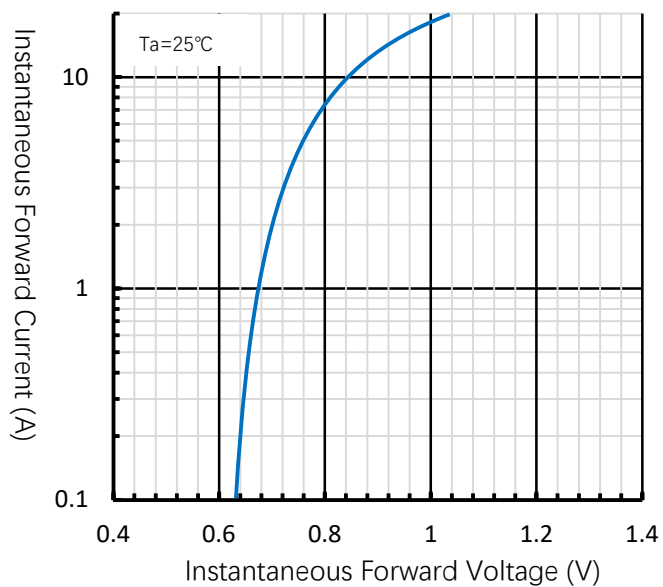


Fig. 3 Typical Forward Characteristic

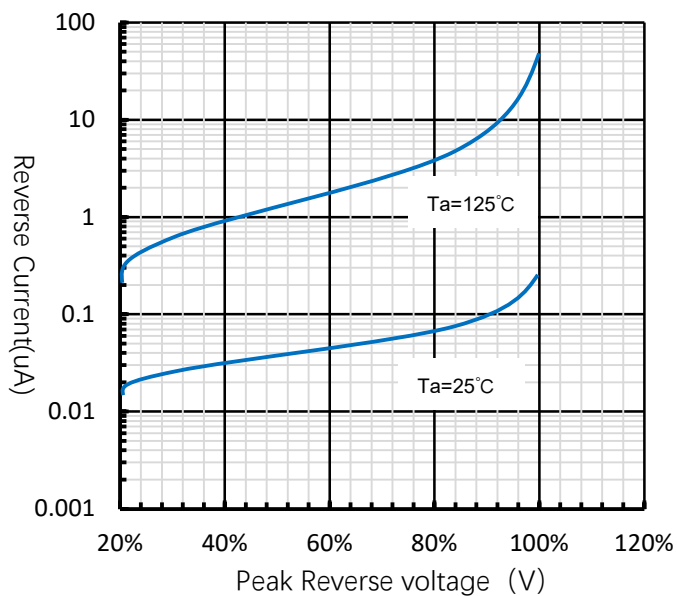


Fig. 4 Typical Reverse Characteristics

■ Outline Dimensions Dimensions in inches and (millimeters)

Package: KBJ

