15A Single Phase Bridge Rectifier

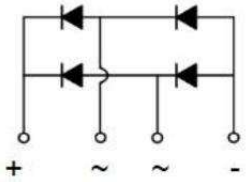
Features

- Ideal for printed circuit boards
- High case dielectric strength
- Reverse Voltage : 50 to 1000V
- Forward Current : 15A
- High temperature soldering : 260 °C/10s at terminals

KBJ

Applications

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



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter		Symbol	KBJ 15005	KBJ 1501	KBJ 1502	KBJ 1504	KBJ 1506	KBJ 1508	KBJ 1510	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 Current @T_C=100℃ with heatsink (Note 1)		$I_{F(AV)}$	15							A
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load(JEDEC method)		I_{FSM}	220							A
Rating for fusing (t<8.3ms,Tj=25℃)		I^2t	200							A^2s
Maximum Instantaneous Forward Voltage @7.5A		V_F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_R	10							μA
	T_A=125℃		500							
Typical Thermal Resistance (Note 1)		$R_{\theta JC}$	1.6							°C/ W
Operating Junction and Storage Temperature Range		T_J, T_{STG}	(-55 to+150)							°C

Notes:
1. Device mounted on 75mm*75mm*1.6mm Al plate heatsink.

Ratings and Characteristic Curves (T_A=25℃ unless otherwise noted)

FIG.1 - Typical forward current

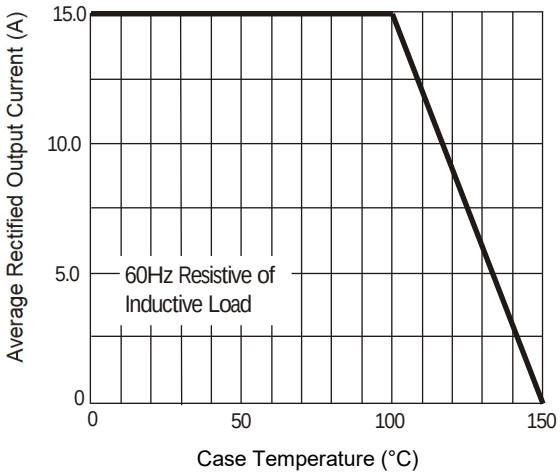


FIG.2 - Maximum Non-Repetitive Peak Forward Surage Current

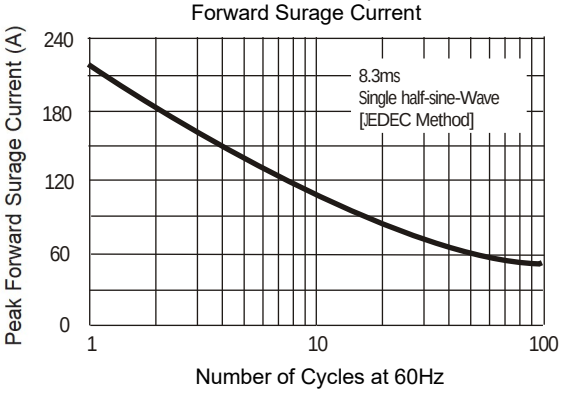


FIG.3 - Typical Junction Capacitance

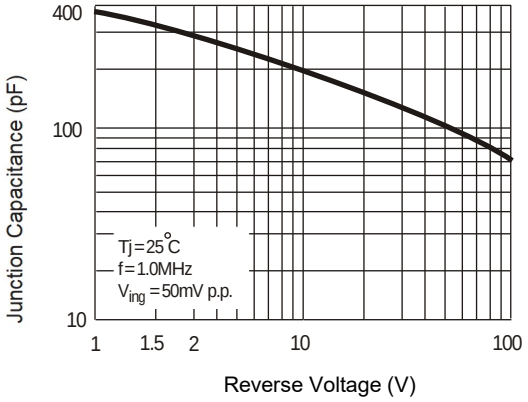


FIG.4 - Typical Instaneous Forward Characteristics

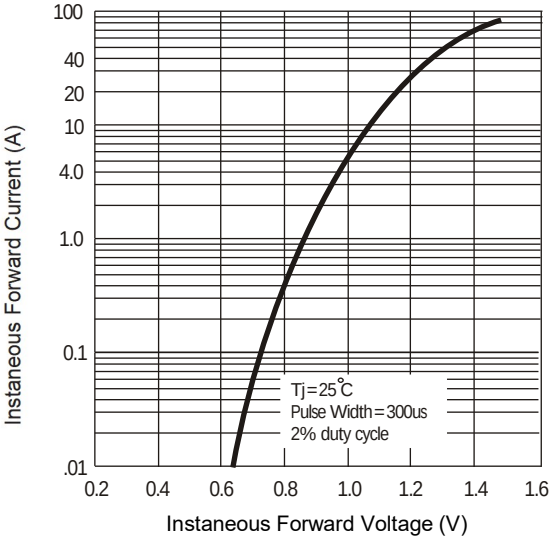
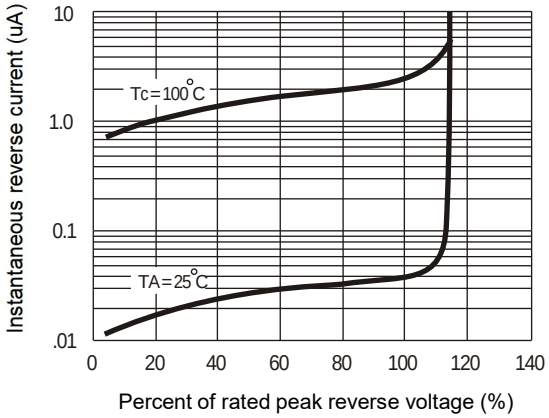
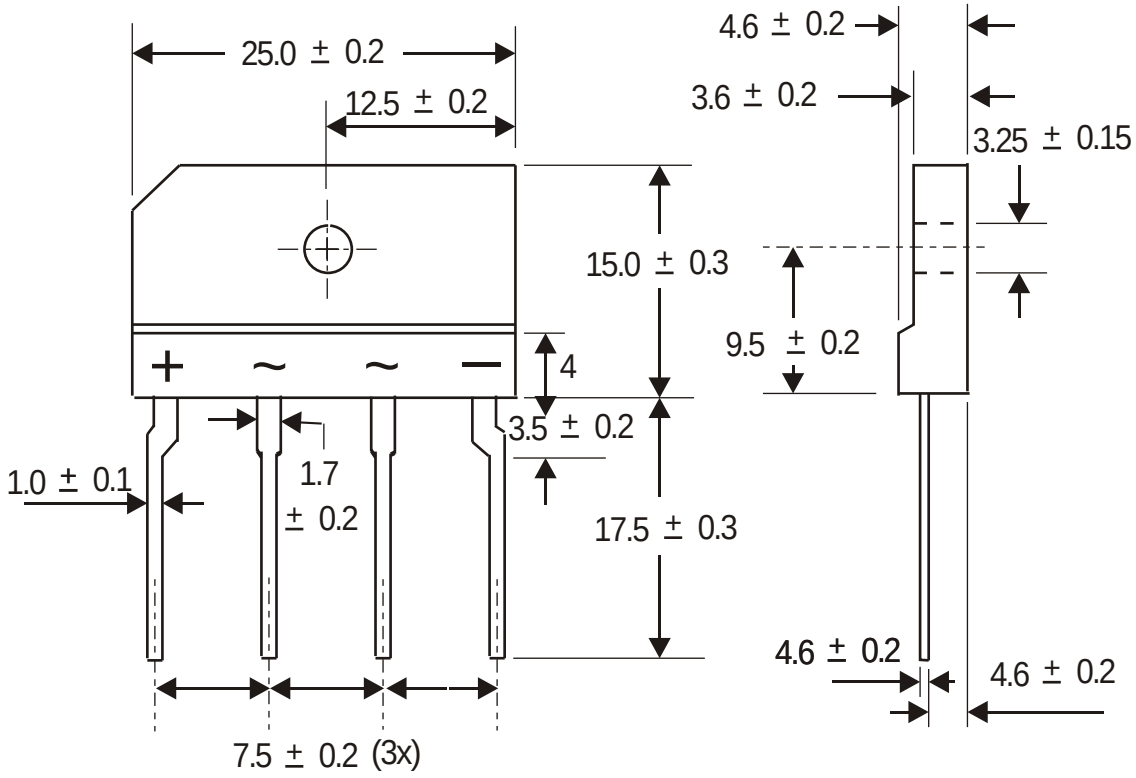


FIG.5 - Typical reverse Characteristics



Package Outlines (Dimensions in mm)

Plastic surface mounted package(KBJ)



Dimensions in millimeters(1mm =0.0394")

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