

RoHS compliant product

FEATURES

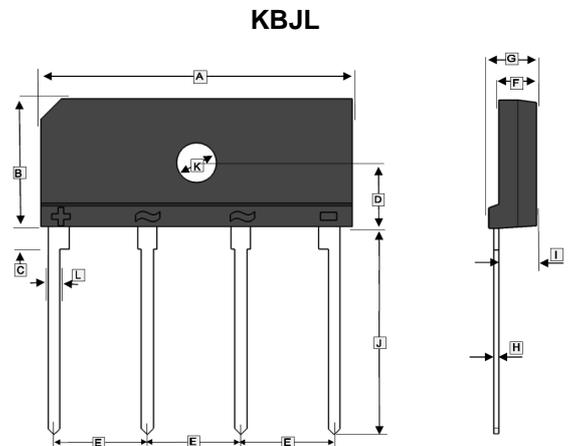
- Thin Single In-Line Package
- Ideal for Printed Circuit Boards
- Glass Passivated Chip Junction
- Low Profile Package
- High Surge Current Capability
- Plastic package has Underwrites Laboratory Flammability Classification 94V-0

MECHANICAL DATA

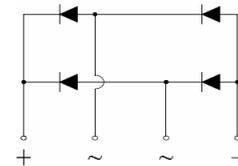
- Case: KBJL
Epoxy meets UL-94V-0 Flammability Rating
- Terminals: Matte Tin Plated Leads, Solderable per J-STD-002 and JESD22-B102, E3 Suffix for Customer Grade, meets JESD 201 Class 1A Whisker Test
- High Temperature Soldering Guaranteed:
Solder Dip 275°C, 40seconds
- Polarity: As Marked on Body

ORDER INFORMATION

Part Number	Type
KBJL10M	Lead (Pb)-free
KBJL10ME	Lead (Pb)-free and Halogen-free



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	24.7	25.3	G	3.6	4.0
B	10.0	10.6	H	0.3	0.7
C	1.7 TYP.		J	17.7	18.7
D	5.5	5.9	K	3.0	3.4
E	7.3	7.7	L	0.9	1.1
F	2.8	3.2			



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Ratings	Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V	
Maximum RMS Voltage	V_{RMS}	700		
Maximum DC Blocking Voltage	V_{DC}	1000		
Maximum Average Forward Rectified Output Current	I_F	$T_C=110^\circ\text{C}^1$	10	A
		$T_A=25^\circ\text{C}^2$	3.1	
Peak Forward Surge Current, 8.3ms single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	180	A	
Rating for Fusing @ $t < 8.3\text{ms}$	I^2t	134	A ² S	
Maximum Instantaneous Forward Voltage Drop per leg @5A	V_F	0.98	V	
Maximum DC Reverse Current @Rated DC Blocking Voltage per leg	I_R	$T_A=25^\circ\text{C}$	5	μA
		$T_A=125^\circ\text{C}$	150	
Typical Thermal Resistance from Junction-Ambient ²	$R_{\theta JA}$	25	$^\circ\text{C/W}$	
Typical Thermal Resistance from Junction-Case ¹	$R_{\theta JC}$	1.8		
Operating Junction & Storage Temperature Range	T_J, T_{STG}	-55~150	$^\circ\text{C}$	

Notes:

1. Unit case mounted on Al plate heatsink.
2. Units mounted on PCB without heatsink.
3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.

RATINGS AND CHARACTERISTIC CURVES

Figure 1. Derating Curve Output Rectified Current

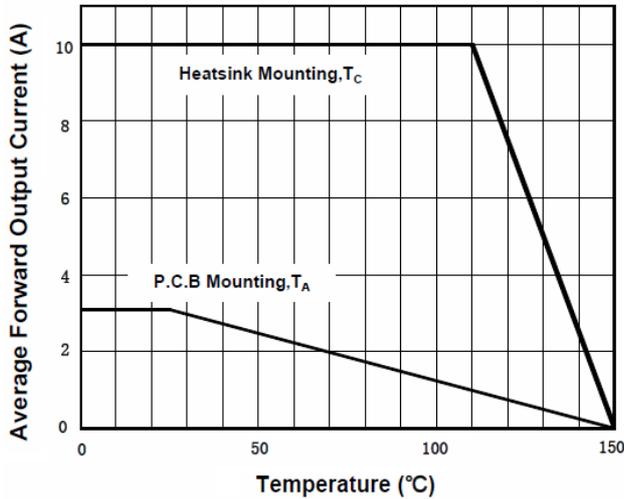


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current per Diode

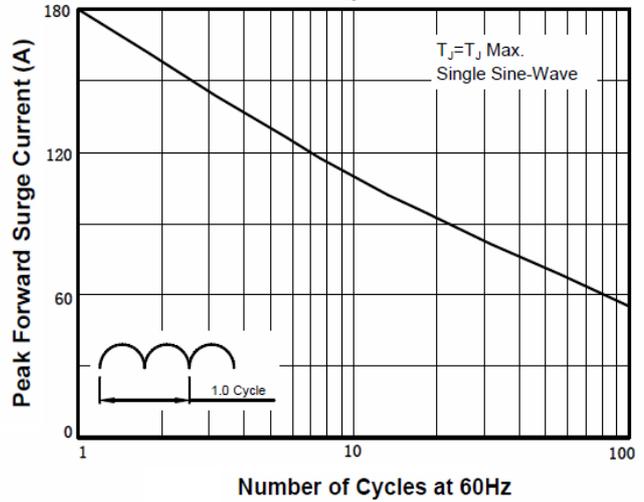


Figure 3. Typical Forward Characteristics Per Diode

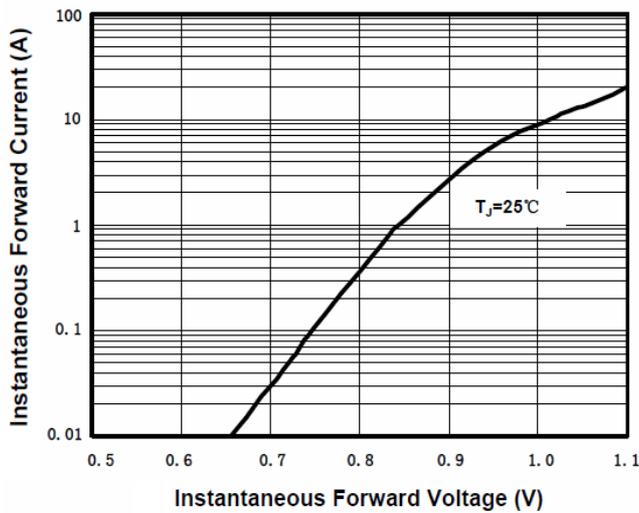


Figure 4. Typical Junction Capacitance Per Diode

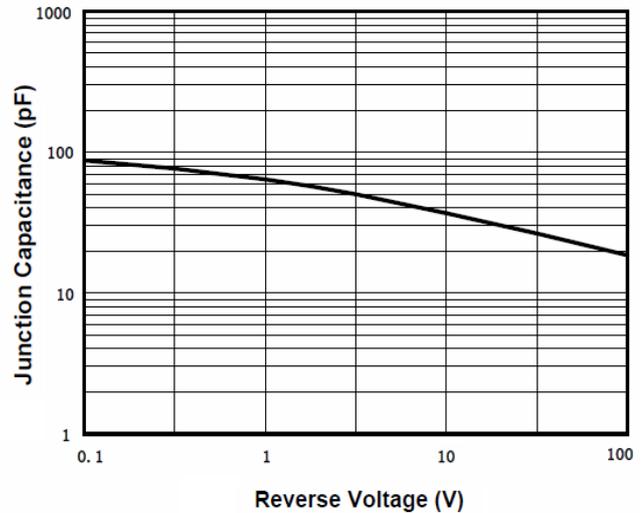


Figure 5. Typical Reverse Characteristics Per Diode

