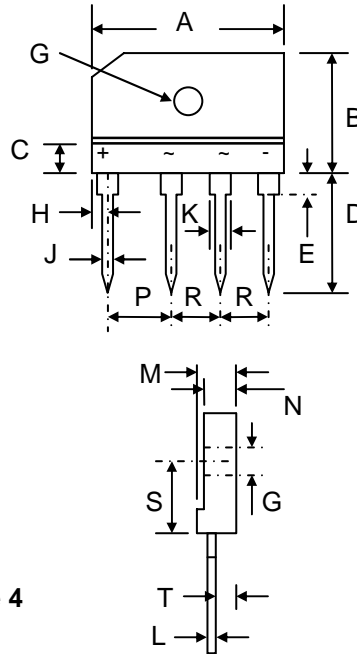


## Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Recognized File # E157705

## Mechanical Data

- Case: KBJ-6, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 7.4 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 10 cm·kg (8.8 in·lbs) Max.
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**



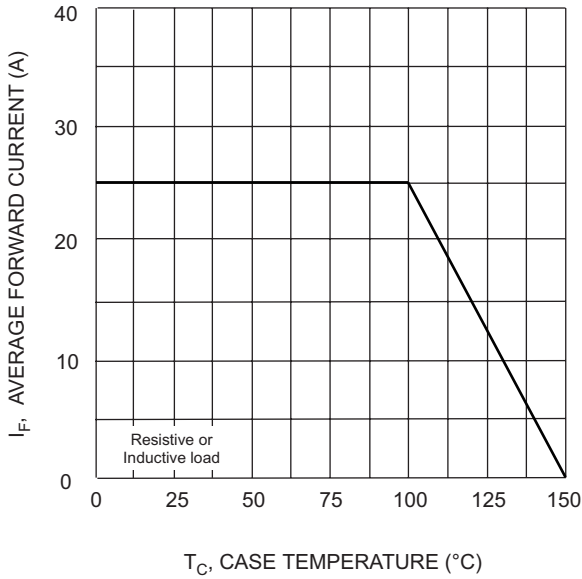
KBJ-6		
Dim	Min	Max
A	29.7	30.3
B	19.7	20.3
C	—	5.0
D	17.0	18.0
E	3.8	4.2
G	3.1Ø	3.4Ø
H	2.3	2.7
J	0.9	1.1
K	1.8	2.2
L	0.6	0.8
M	4.8	5.3
N	4.05	4.35
P	9.8	10.2
R	7.3	7.7
S	10.8	11.2
T	2.3	2.7
All Dimensions in mm		

## Maximum Ratings and Electrical Characteristics @<sub>T<sub>A</sub></sub>=25°C unless otherwise specified

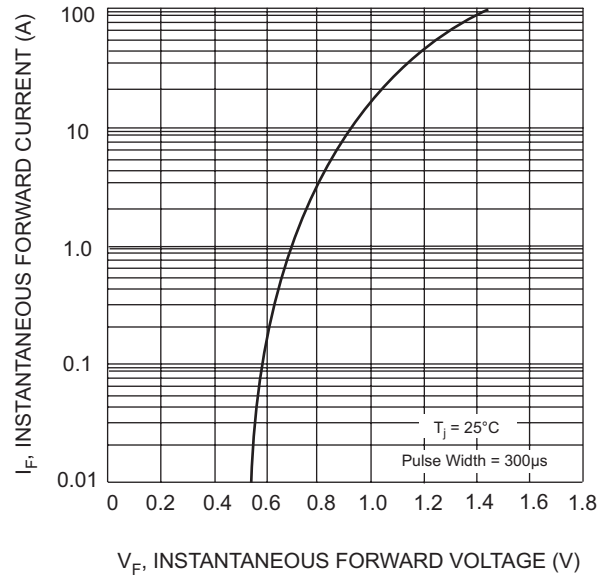
Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	KBJ 25A	KBJ 25B	KBJ 25D	KBJ 25G	KBJ 25J	KBJ 25K	KBJ 25M	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>								
Working Peak Reverse Voltage	V <sub>RWM</sub>	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V <sub>R</sub>								
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @ <sub>T<sub>C</sub></sub> = 100°C (Note 1)	I <sub>O</sub>	25							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	350							A
Forward Voltage per diode @ <sub>I<sub>F</sub></sub> = 12.5A	V <sub>FM</sub>	1.05							V
Peak Reverse Current @ <sub>T<sub>A</sub></sub> = 25°C	I <sub>R</sub>	10							μA
At Rated DC Blocking Voltage @ <sub>T<sub>A</sub></sub> = 125°C		350							
Typical Thermal Resistance per leg (Note 2)	R <sub>θJA</sub>	22							°C/W
Typical Thermal Resistance per leg (Note 1)	R <sub>θJC</sub>	1.0							°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55 to +150							°C

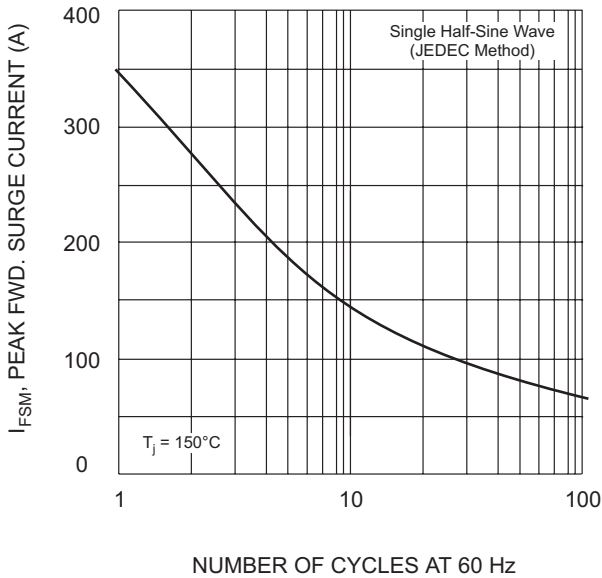
Note: 1. Device mounted on 220 x 220 x 1.6mm thick Al plate heatsink.  
2. Device mounted on P.C.B. without heatsink.



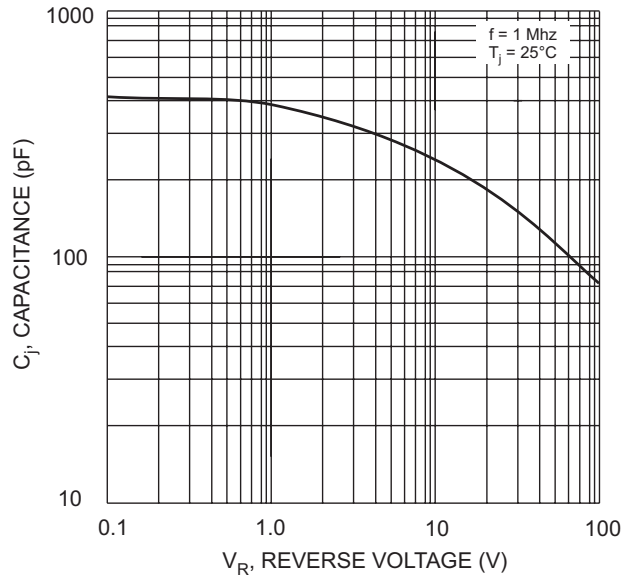
$T_C$ , CASE TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



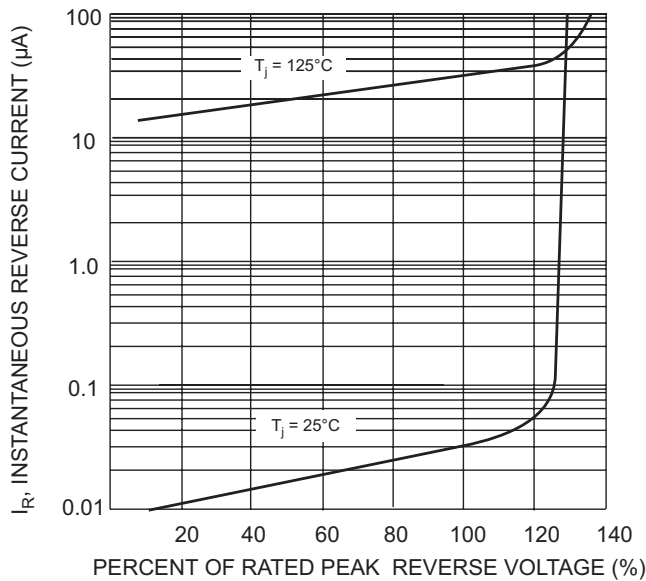
$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz  
Fig. 3 Max Non-Repetitive Surge Current

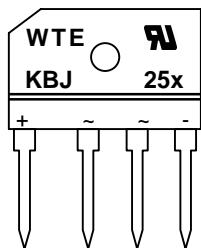


$V_R$ , REVERSE VOLTAGE (V)  
Fig. 4 Typical Junction Capacitance (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)  
Fig. 5 Typical Reverse Characteristics (per element)

## MARKING INFORMATION



WTE = Manufacturer's Logo  
 KBJ25x = Device Number  
 x = A, B, D, G, J, K or M  
 Polarity = As Marked on Body

## PACKAGING INFORMATION

### BULK

Tube Size L x W x H (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
475 x 40 x 7	15	490 x 145 x 135	750	510 x 305 x 160	1,500	17.0

**Note:** 1. Anti-static tube, water clear color.

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBJ25A	SIL Bridge	15 Units/Tube
KBJ25B	SIL Bridge	15 Units/Tube
KBJ25D	SIL Bridge	15 Units/Tube
KBJ25G	SIL Bridge	15 Units/Tube
KBJ25J	SIL Bridge	15 Units/Tube
KBJ25K	SIL Bridge	15 Units/Tube
KBJ25M	SIL Bridge	15 Units/Tube

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, KBJ25A-LF.**

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**WARNING:** DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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*We power your everyday.*