SENSITRON

SEMICONDUCTOR

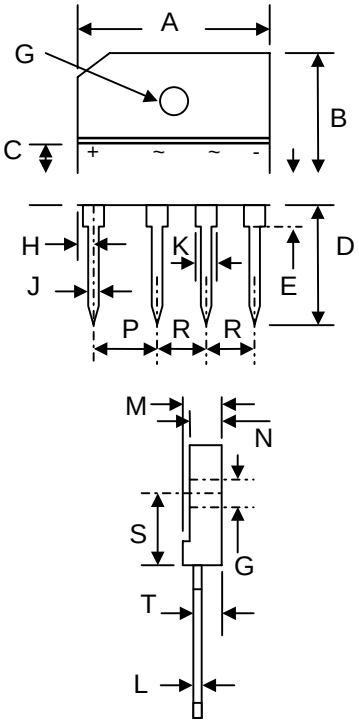
KBJ25A – KBJ25Q

25A BRIDGE RECTIFIER

Data sheet 1278, Rev. C

Features

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



KBJ-6				
Dim	**Min**	**Max**	**Min**	**Max**
A	29.7	30.3	1.169	1.193
B	19.7	20.3	0.776	0.799
C	—	5.0	—	0.197
D	17.0	18.0	0.669	0.709
E	3.8	4.2	0.150	0.165
G	3.1 Ø	3.4 Ø	0.122	0.134
H	2.3	2.7	0.091	0.106
J	0.9	1.1	0.035	0.043
K	1.8	2.2	0.071	0.087
L	0.6	0.8	0.024	0.031
M	4.8	5.3	0.189	0.209
N	4.05	4.35	0.159	0.171
P	9.8	10.2	0.386	0.402
R	7.3	7.7	0.287	0.303
S	11.8	12.2	0.465	0.480
T	3.2	3.4	0.126	0.134
	In mm		**In inch**	

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 4.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

Maximum Ratings and Electrical Characteristics @T_A=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	KBJ 25Q	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	1200	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	840	V
Average Rectified Output Current @T_C = 100°C (Note 1)	I_O	25								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300								A
Forward Voltage (per element) @I_F = 12.5A	V_{FM}	1.1								V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_C = 100°C	I_R	10 200								µA
Typical Thermal Resistance (per leg) (Note 1)	$R_{\theta JC}$	0.6								°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150								°C

Note: 1. Device mounted on 220 x 220 x 1.6mm thick AL plate heatsink.

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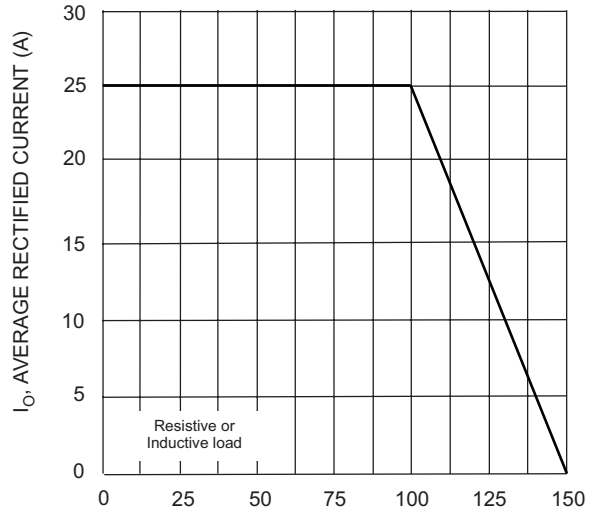

Fig. 1 Forward Current Derating Curve

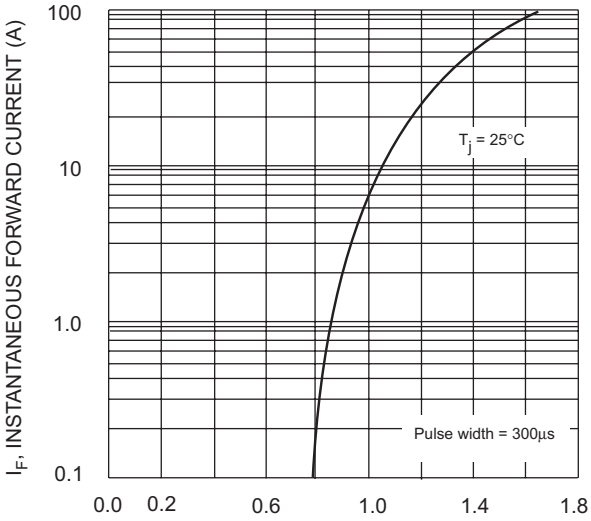

Fig. 2 Typical Fwd Characteristics, per element

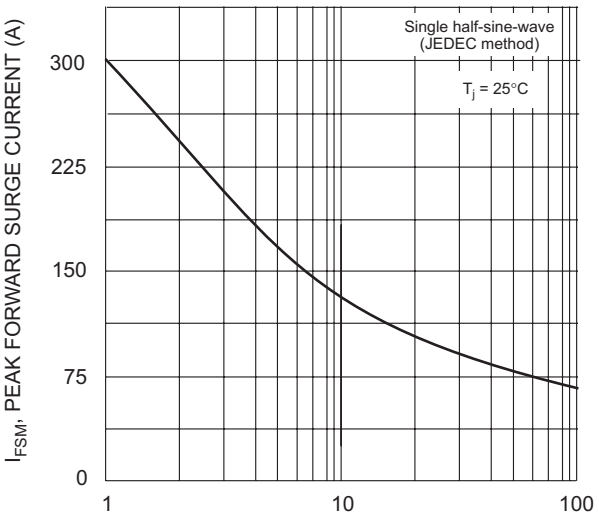

Fig. 3 Maximum Non-Repetitive Surge Current

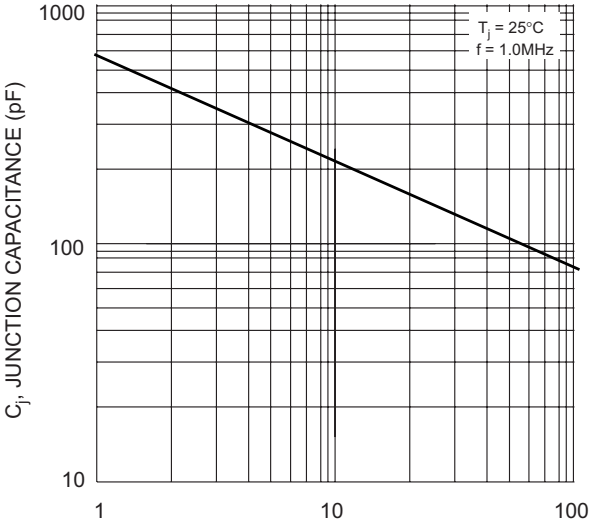

Fig. 4 Typical Junction Capacitance

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