

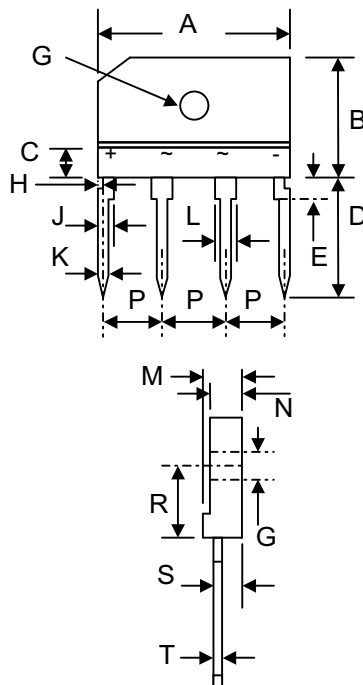
Data sheet 1285 Rev.A

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- UL Recognized File # E223064

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



KBJ-4				
Dim	Min	Max	Min	Max
A	24.7	25.3	0.972	0.996
B	14.7	15.3	0.579	0.602
C	—	4.0	—	0.157
D	17.0	18.0	0.669	0.709
E	3.3	3.7	0.130	0.146
G	3.1Ø	3.4Ø	0.12Ø	0.13Ø
H	1.05	1.45	0.041	0.057
J	1.7	2.1	0.067	0.083
K	0.9	1.1	0.035	0.043
L	1.5	1.9	0.059	0.075
M	4.8	5.16	0.189	0.203
N	3.8	4.4	0.150	0.173
P	7.3	7.7	0.287	0.303
R	9.3	9.7	0.366	0.382
S	3.4	3.9	0.134	0.154
T	0.6	0.8	0.024	0.031
In mm			In inch	

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	Symbo l	KBJ10A	KBJ10B	KBJ10D	KBJ10G	KBJ10J	KBJ10K	KBJ10M	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	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _C = 100°C @T _A = 25°C	I _O	10 3.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	170							A
I ² t Rating for Fusing (t < 8.35ms)	I ² t	120							A ² s
Forward Voltage (per diode) @I _F = 5.0A	V _{FM}	1.05							V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _C = 100°C	I _R	5.0 500							µA
Typical Thermal Resistance (Note 1)	R _{θJC}	2.5							°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150							°C

Note: 1. Thermal resistance junction to case, mounted on 150 x 150 x 1.6mm thick Cu plate heatsink.

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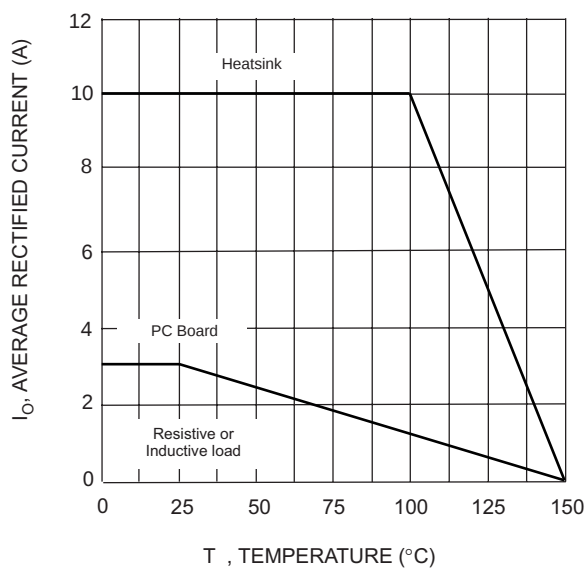


Fig. 1 Forward Current Derating Curve

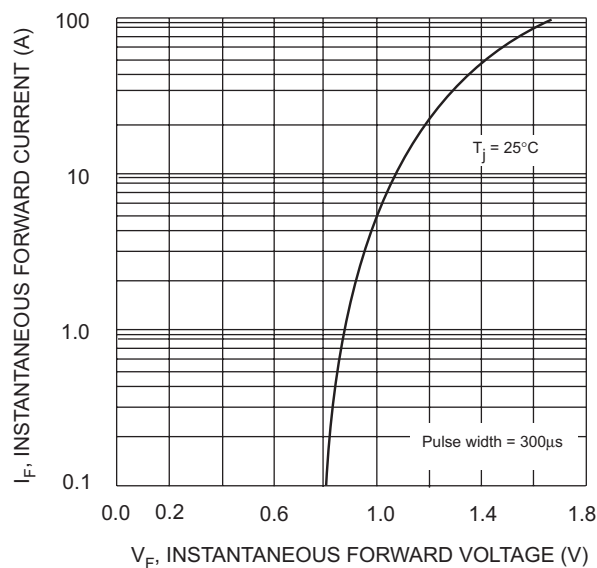


Fig. 2 Typical Fwd Characteristics, per element

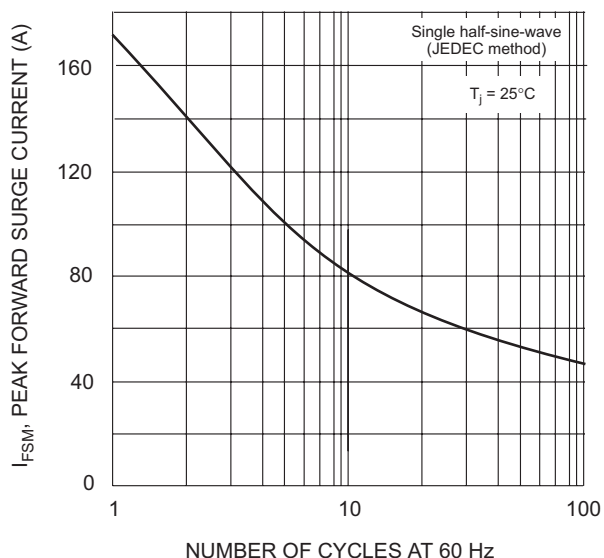


Fig. 3 Maximum Non-Repetitive Surge Current

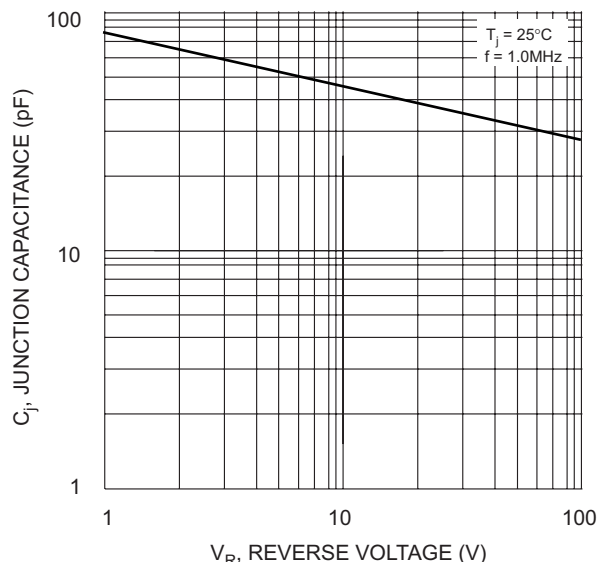


Fig. 4 Typical Junction Capacitance

TECHNICAL DATA

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