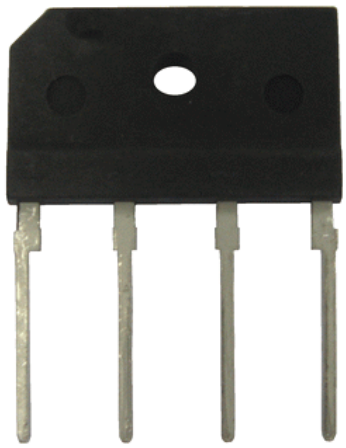
Microsemi Shanghai

SKBJ10D thru SKBJ10M



Glass Passivated Single Phase Bridge Rectifiers

Reverse Voltage 200 to 1000V
Forward Current 10 Amp

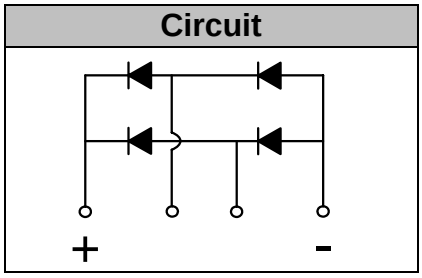
Features

- Glass passivated die construction
- Ideal for printed circuit boards
- Plastic material used carries UL flammability recognition 94V-0
- High surge current capability
- High temperature soldering guaranteed: 265℃ /10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

Mechanical Data

Case: Molded plastic case
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Marked on Body
Mounting Position: Any

Circuit



Module Type

TYPE	V_{RRM}	V_{RSM}
SKBJ10D	200V	300V
SKBJ10G	400V	500V
SKBJ10J	600V	700V
SKBJ10K	800V	900V
SKBJ10M	1000V	1100V

Maximum Ratings and Thermal Characteristics (TA = 25℃ unless otherwise noted)

Symbol	Conditions	Values	Units
$I_{F(AV)}$	Maximum average forward output rectified current Tc =50℃	10	A
I_{FSM}	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	180	A
i^2t	Rating for fusing (t<8.3ms)	134	A^2s
Visol	a.c.50HZ;r.m.s.;1min	2500	V
$R_{\theta JA}$ $R_{\theta JC}$	Maximum thermal resistance per leg	26 (1) 5.0 (2)	℃/W
T_j, T_{STG}	Operating Junction and storage temperature range	-55 to +150	℃
Weight	Approximate Weight	4.0	g

Electrical Characteristics (TA = 25℃ unless otherwise noted)

Symbol	Conditions		Values	Units
V_F	Maximum Instantaneous Forward Voltage per leg	I_{FM} =5.0A	1.05	V
I_R	Maximum DC reverse current at rated DC blocking voltage per leg	T_A = 25℃ T_A = 125℃	5.0 500	μA

Notes: (1) Junction to ambient without heatsink
(2) Junction to case with heatsink
(3) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw

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Performance Curves

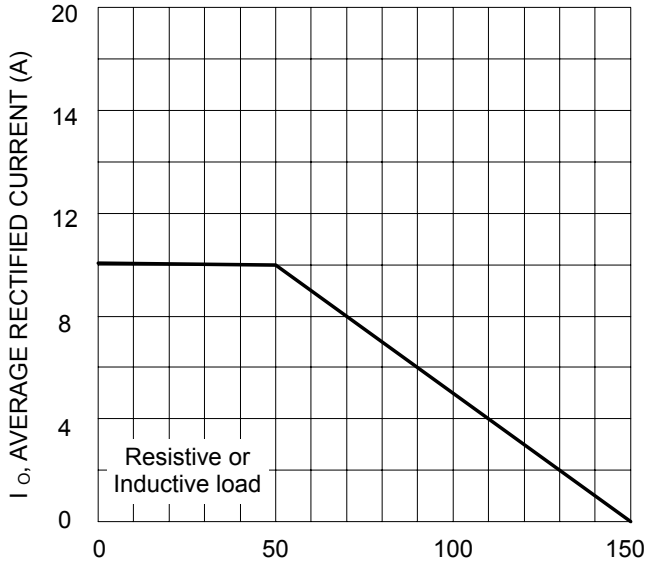

Fig.1 Forward Current Derating Curve

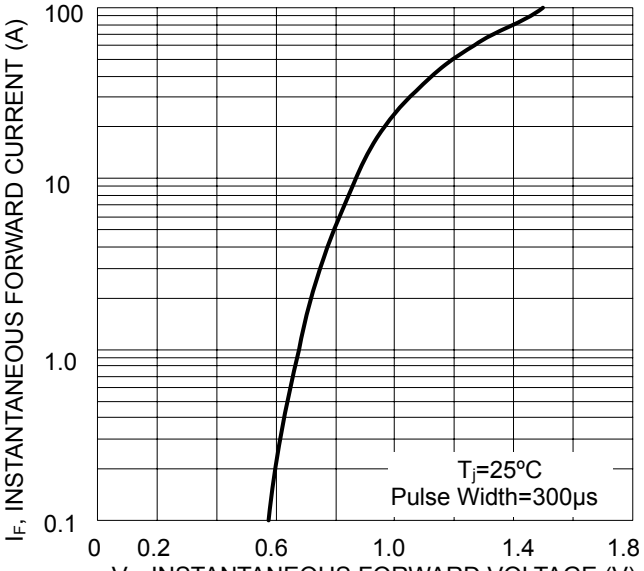

Fig.2 Typical Fwd Characteristics, per element

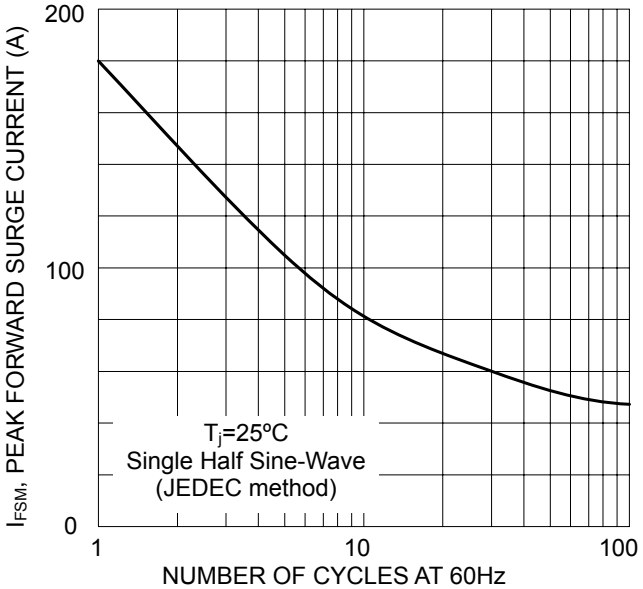

Fig.3 Maximum Non-Repetitive Surge Current

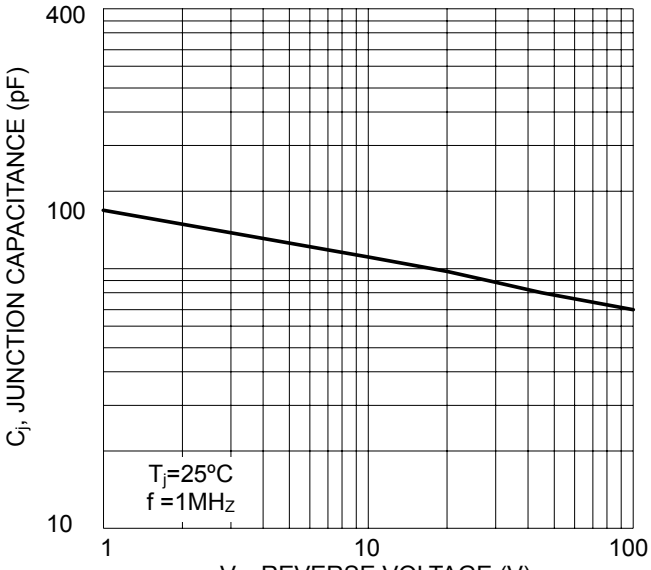

Fig.4 Typical Junction Capacitance

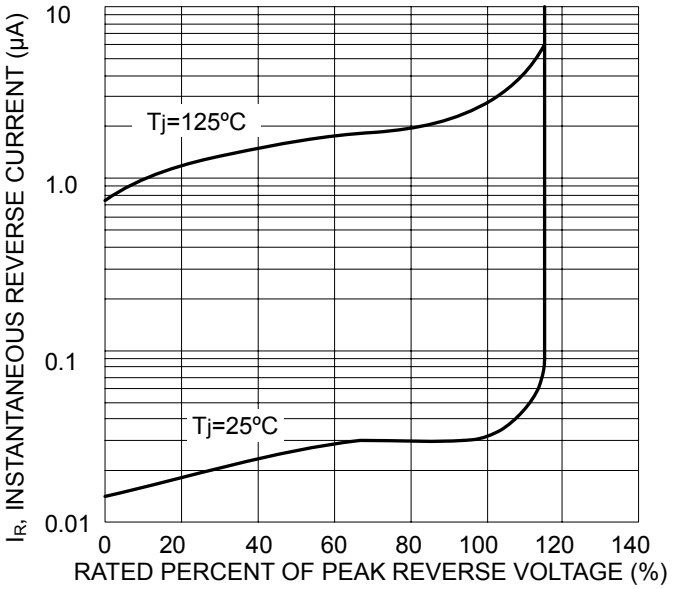

Fig.5 Typical Reverse Characteristics

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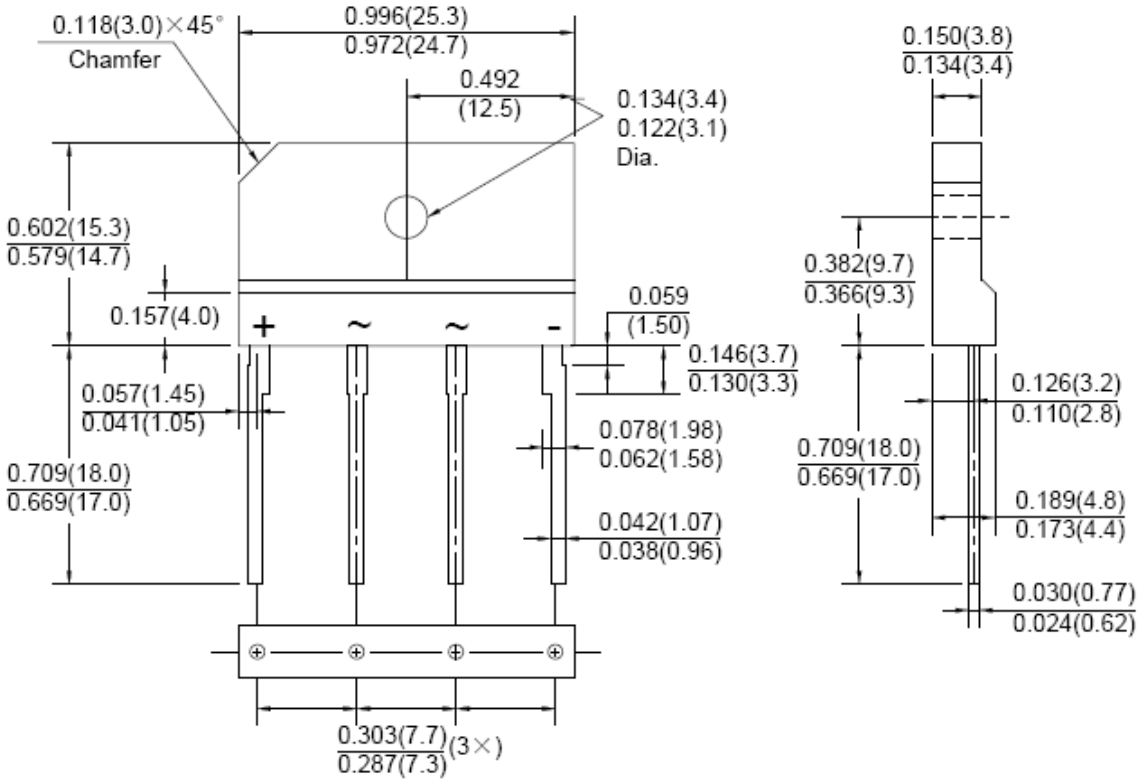
Package Outline Information

CASE: KBJ



Dimensions in inches (mm)

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