

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- High surge forward current capability
- Ideal for automated placement
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Component in accordance to RoHS 2015/863/EU

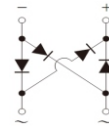
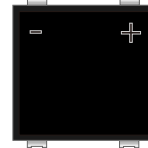
Mechanical data

- Case:JBF molded plastic body
- Terminals:Plated leads solderable per MIL-STD-750,method 2026
- Polarity:As marked
- Mounting Position:Any



**HALOGEN
FREE**

JBF



APPLICATIONS

- Used in high frequency AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

Maximum Ratings And Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

Parameters	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	600	V
Maximum average forward rectified current	$I_{F(AV)}$	8.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method,Total device)	I_{FSM}	220	A
Rating for fusing($t < 8.3ms$)	I^2t	201	A ² S
Operating junction temperature range	T_j	-55 to 150	°C
Storge temperature range	T_{stg}	-55 to 150	°C

Electrical Characteristcs (Per diode, $T_A=25^{\circ}\text{C}$ Unless otherwise noted)

Parameter	Test Conditions		Symbol	Min.	Typ.	Max.	Unit
Breakdown voltage Blocking voltage	I _r =10μA		V _{BR} V _R	620	-	-	V
Instaneous forward voltage	T _j =25°C	I _f =1.0A	V _F ¹⁾	-	0.81	-	V
		I _f =8.0A		-	-	0.95	
	T _j =125°C	I _f =1.0A		-	0.67	-	
		I _f =8.0A		-	-	0.83	
Reverse current	T _j =25°C	V _R =600V	I _R ²⁾	-	-	5	μA
	T _j =125°C			-	-	250	
Junction capacitance	4V,1MHz		C _j	-	83	-	pF

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2.Pulse test: pulse width $\leq 40\text{ms}$

Thermal Characteristics

Parameter	Symbol	JBF	Unit
Typical thermal resistance ³⁾	$R_{\theta JC}$	5.0	$^{\circ}\text{C}/\text{W}$

3.Thermal resistance from per diode junction to case

Fig.1-Forward Current Derating Curve

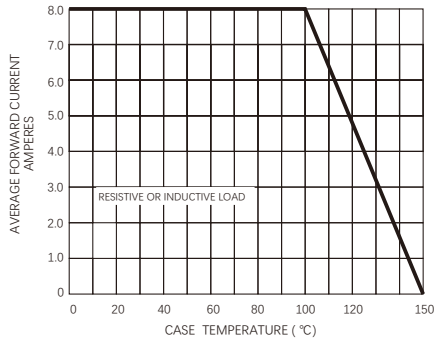


Fig.2-Maximum Non-repetitive Peak Forward Surge Current

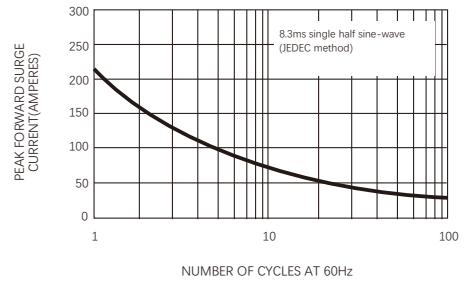


Fig.3-Typical Instantaneous Forward Characteristics

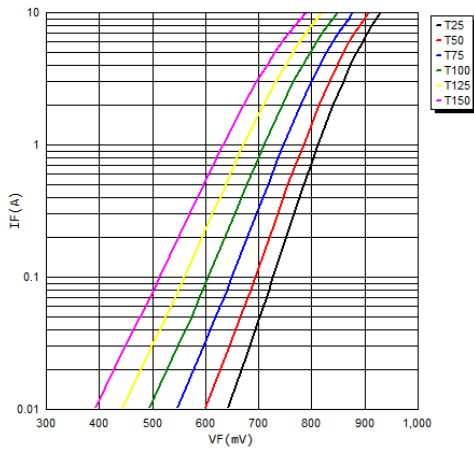
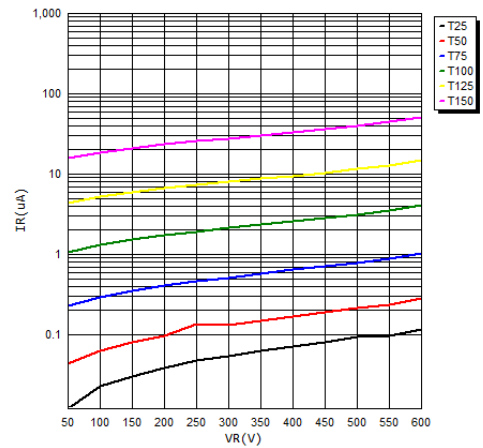
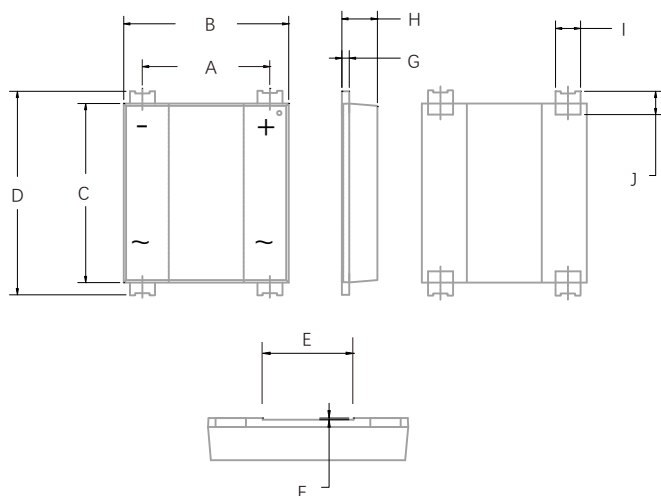


Fig.4-Typical Reverse Characteristics

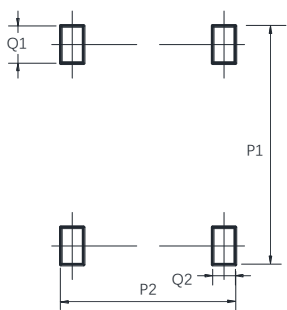


JBF



UNIT:mm		
DIM	MIN	MAX
A	4.80	5.30
B	6.20	7.00
C	7.10	8.20
D	7.90	8.90
E	2.90	3.10
F	0.04	0.08
G	0.15	0.40
H	1.30	1.50
I	0.80	1.20
J	0.70	1.60

Suggested Pad layout



Dimensions in millimeters

Dim	Min
P1	9.15
P2	7.10
Q1	1.80
Q2	2.00

Friendship Reminder

- JiNan JingHeng (hereinafter referred to as JH) reserves the right to make changes to this document and its products and specifications at anytime without notice.
- Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
- JH makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does JH assume any liability for application assistance or customer product design.
- JH does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.
- No license is granted by implication or otherwise under any intellectual property rights of JH.
- JH's products are not authorized for use as critical components in life support devices or systems without express written approval of JH.