

GOOD-ARK Electronics

# Reverse Voltage 100~1000V Output Current 2.0A

#### **Features**

- •Glass passivated Bridge Rectifiers
- ●Ideal for PCB
- High surge current capability
- •Moisture sensitivity: level 1, per J-STD-020
- •High temperature soldering guaranteed: 260°C/10 seconds
- Halogen-free according to IEC 61249-2-21 definition







**KBF** 

### **Typical Applications**

•General purpose use in ac-to-dc bridge full wave rectification for TV,Monitor,SMPS,Adapter, Printer,Audio equipment,and Home Applications application

### **Mechanical Data**

- •Case:KBF,Molding compound meets UL 94V-0 flammability rating Base P/N with suffix"E" on packing code-halogen free
- •Terminals:Matte tin plated leads,solderable per MII-STD-750 Method 2026,J-STD-002 and JESD22-B102, meets JESD 201 class 1A whisker test

Maximum Ratings (TA = 25 °C unless otherwise noted)									
Parameter		Symbol	KBF201	KBF202	KBF204	KBF206	KBF208	KBF210	Unit
Maximum repetitive peak reverse voltage		$V_{RRM}$	100	200	400	600	800	1000	٧
Maximum RMS voltage		$V_{RMS}$	70	140	280	420	560	700	٧
Maximum DC blocking voltage		$V_{DC}$	100	200	400	600	800	1000	<b>V</b>
Maximum average output rectified current		I <sub>F(AV)</sub>	2.0						Α
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load		I <sub>FSM</sub>	60					Α	
Rating for fusing (t≤8.3ms)		l <sup>2</sup> t	15						A <sup>2</sup> s
Operating junction and storage temperature range		T <sub>J</sub> , T <sub>STG</sub>	-55 to 150					°C	
Typical junction capacitance	4.0 V, 1 MHz	CJ	16.7				pF		



Electrical Characteristics (TA = 25 °C unless otherwise noted)									
Parameter	Test Conditions	Symbol	KBF201	KBF202	KBF204	KBF206	KBF208	KBF210	Unit
Maximum instantaneous forward voltage	IF=1.0A		0.95						
	IF=2.0A	VF	1.1						
Maximum DC reverse current at rated DC blocking voltage	TA=25°C		5.0						
	TA=125°C	lR	200						μА
Typical thermal resistance <sup>1)</sup>	juntion to ambie	RøJA	28					°C/W	
	juntion to case	RθJC	8						

Note:1),The thermal resistance from junction to ambient and case,mounted on glass epoxy FR-4 P.C.B



## **Ratings and Characteristics Curves**

(TA = 25°C unless otherwise noted)

Figure 1.Forward Current Derating Curve

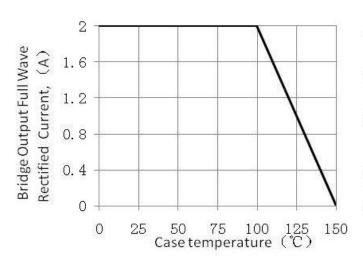


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

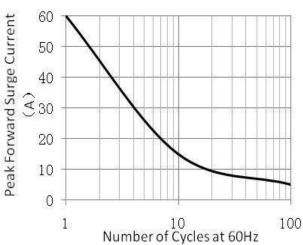


Figure 3. Typical Instantaneous Forward Characteristics

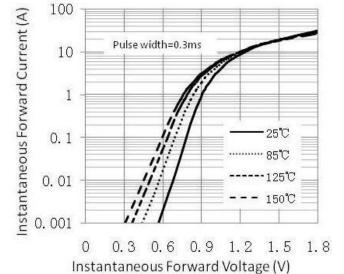
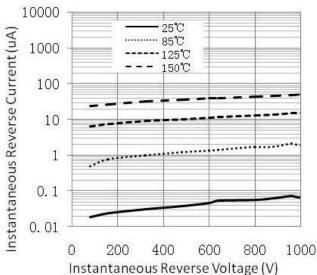


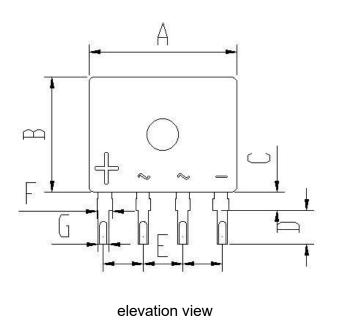
Figure 4. Typical Reverse Characteristic

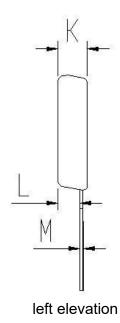


# **Package Outline Dimensions**

Unit:mm

### First angle projection





	MIN	MAX			
Α	13.95	14.45			
В	10.80	11.20			
С	1.75 Typical				
D	3.00	3.50			
E	3.61	4.01			
F	1.30	1.70			
G	0.90	1.10			
K	2.65	2.95			
L	2.00	2.20			
М	0.26	0.46			

**Revision History** 

Document Version	Date of release	Discription of changes		
Rev.A	2021/3/1	Released Datasheet		
Rev.B	2023/10/17	Modify document format		



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