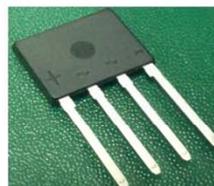


Features

- 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



Case Style KBF



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

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

Maximum Ratings (TA = 25 °C unless otherwise noted)

Parameter	Symbol	KBF401	KBF402	KBF404	KBF406	KBF408	KBF410	Unit
Maximum repetitive peak reverse voltage	VRRM	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	100	200	400	600	800	1000	V
Maximum average output rectified current	$I_{O(AV)}^{1)}$	4.0						A
	$I_{O(AV)}^{2)}$	2.0						
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	150.0						A
Rating for fusing (t≤8.3ms)	I^2t	93.8						A ² s
Operating junction and storage temperature range	TJ, TSTG	-55 to 150						°C

Note1)with heatsink;

2)without heatsink

Electrical Characteristics (TA = 25 °C unless otherwise noted)

Parameter	Test Conditions	Symbol	KBF401	KBF402	KBF404	KBF406	KBF408	KBF410	Unit
Maximum instantaneous forward voltage	IF=2.0A	V_F	1.0						Volts
	IF=4.0A		1.1						
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I_R	5.0						μA
	TA=125°C		200.0						
Typical junction capacitance	4.0 V, 1 MHz	C_J	34.0						pF



KBF401 thru KBF410

Glass Passivated Single-Phase Bridge Rectifier
 Reverse Voltage 100~1000V Output Current 4.0A

Thermal Characteristics (Ta=25°C unless otherwise noted)									
Parameter	Test Conditions	Symbol	KBF401	KBF402	KBF404	KBF406	KBF408	KBF410	Unit
Typical thermal resistance ¹⁾	junction to ambient	R _{θJA}	30						°C/W
	junction to case	R _{θJC}	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)

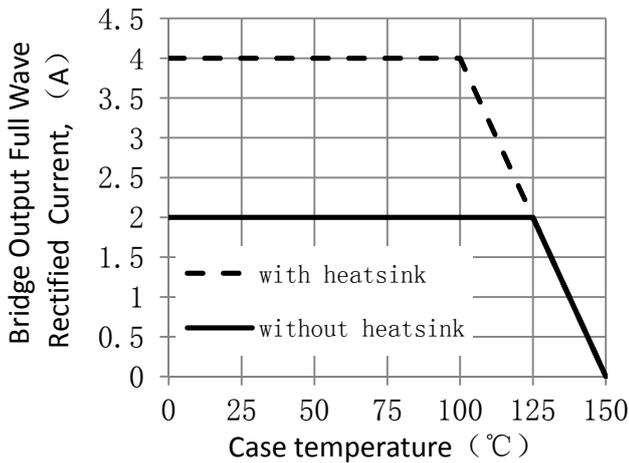


Figure 1. Forward Current Derating Curve

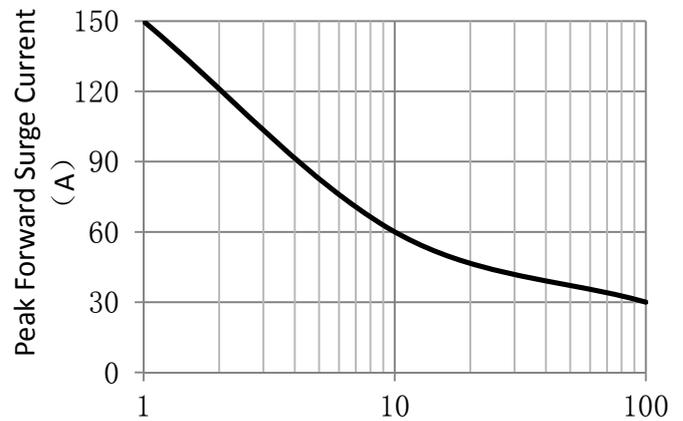


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

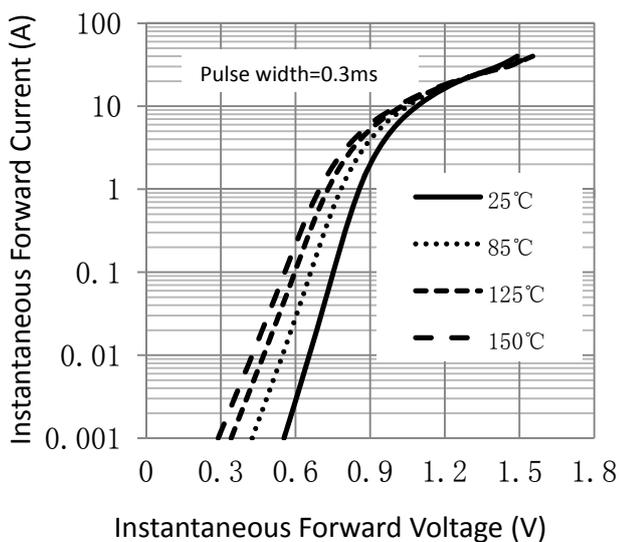


Figure 3. Typical Instantaneous Forward Characteristics

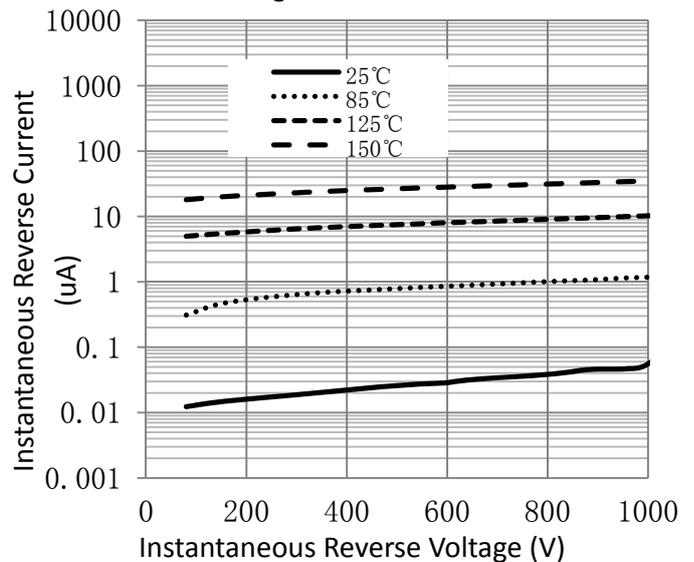
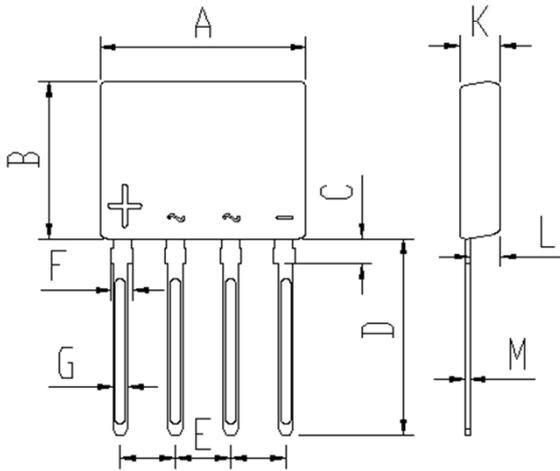


Figure 4. Typical Reverse Characteristics

Package Outline Dimensions

Unit:mm



	MIN	MAX
A	13.95	14.45
B	10.80	11.20
C	1.75 Typical	
D	13.50	14.00
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
M	0.26	0.46



KBF401 thru KBF410

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Reverse Voltage 100~1000V Output Current 4.0A

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