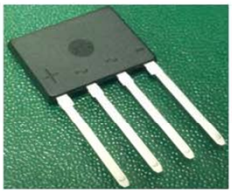
KBF201U thru KBF210U

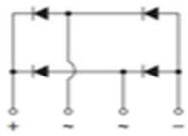
Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage 100~1000V Ountput Current 2.0A

Features



Case Style KBF



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

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	KBF201U	KBF202U	KBF204U	KBF206U	KBF208U	KBF210U	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	Io(AV)	2.0						A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	80						A
Rating for fusing (t≤8.3ms)	I^2t	27						A^2s
Operating junction and storage temperature range	TJ, TSTG	-55 to 150						°C

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

Parameter	Test Conditions	Symbol	KBF201U	KBF202U	KBF204U	KBF206U	KBF208U	KBF210U	Unit
Maximum instantaneous forward voltage	IF=1.0A	V_F	0.95						Volts
	IF=2.0A		1.0						
Maximum DC reverse current at rated DC blocking voltage	TA=25℃	I_R	5.0						μA
	TA=125℃		200						
Typical junction capacitance	4.0 V, 1 MHz	C_J	24.2						pF

Thermal Characteristics (Ta=25℃ unless otherwixe noted)									
Parameter	**Test Conditions**	**Symbol**	**KBF201U**	**KBF202U**	**KBF204U**	**KBF206U**	**KBF208U**	**KBF210U**	**Unit**
Typical thermal resistance[1)]	juntion to ambient	$R_{\theta JA}$	40						℃/W
	juntion to case	$R_{\theta JC}$	10						

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℃ unless otherwise noted)

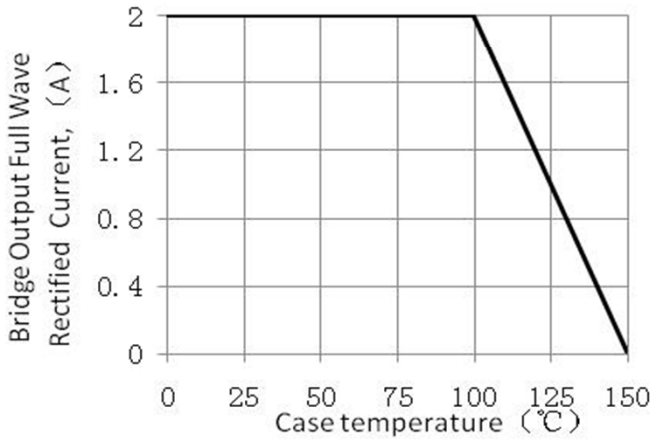


Figure 1.Forward Current Derating

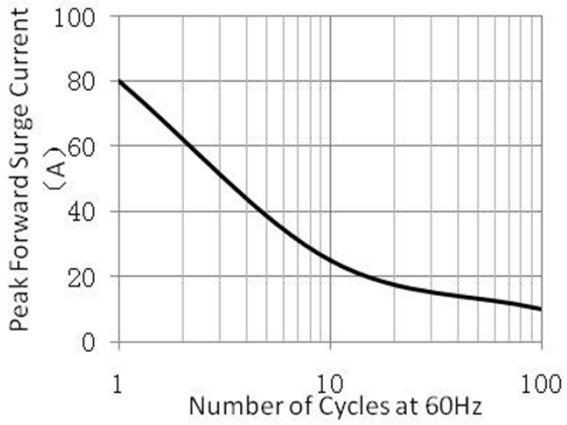


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

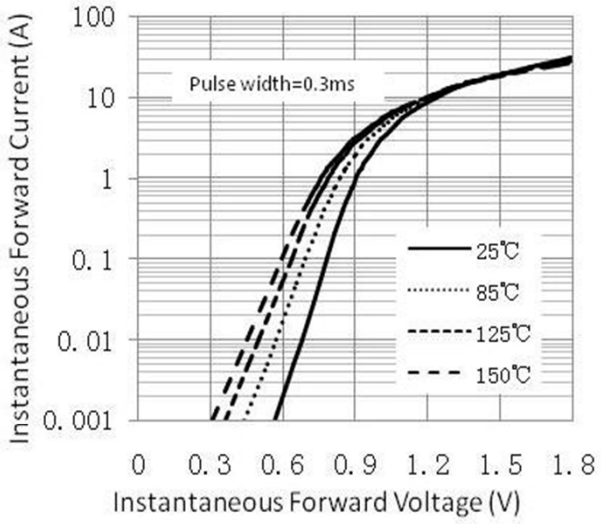


Figure 3. Typical Instantaneous Forward Characteristics

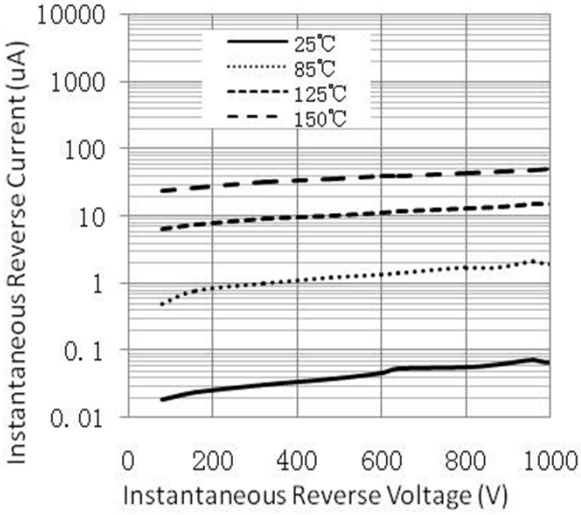
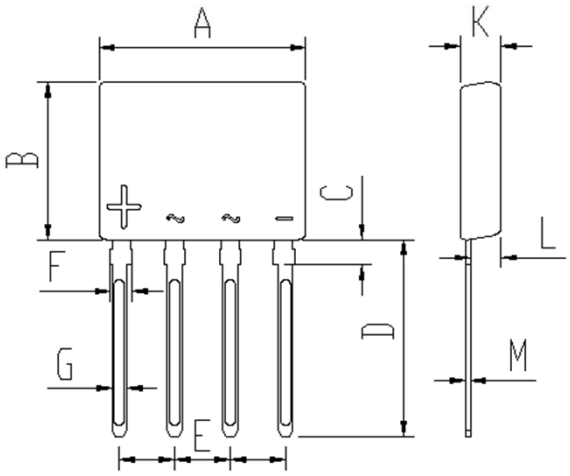


Figure 4. Typical Reverse Characteristics

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

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