

KBP Plastic-Encapsulate Bridge Rectifier

Features

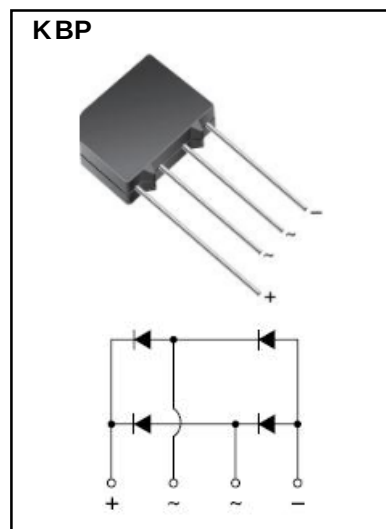
- I_O 3.0A
- V_{RRM} 50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- K BP3XX
- XX : From 005 To 10



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	KBP3							
				005	01	02	04	06	07	08	10
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	700	800	1000
Average Rectified Output Current	I_O	A	60Hz sine wave, R- load, $T_a=50^{\circ}\text{C}$	3							
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, $T_a=25^{\circ}\text{C}$	80							
Current Squared Time	I^2t	A^2s	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^{\circ}\text{C}$, Rating of per diode	26.5							
Storage Temperature	T_{stg}	$^{\circ}\text{C}$		-55 ~ +150							
Junction Temperature	T_j	$^{\circ}\text{C}$		-55 ~ +150							

Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	$I_{FM}=3\text{A}$, Pulse measurement, Rating of per diode	1.1
Peak Reverse Current	I_{RRM}	μA	$V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode	10
Thermal Resistance ⁽¹⁾	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	Between junction and ambient	30
	$R_{\theta J-L}$		Between junction and lead	11

(Notes) :

(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.47×0.47 " ($12 \times 12\text{mm}$) copper pads

FIG.1-DERATING CURVE
OUTPUT RECTIFIED CURRENT

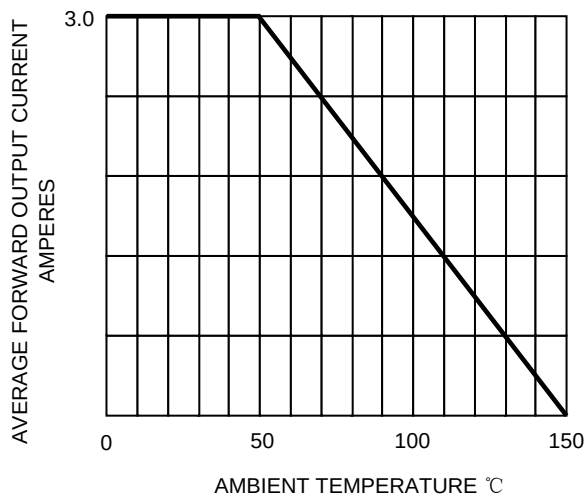


FIG.2-TYPICAL FORWARD
CHARACTERISTICS

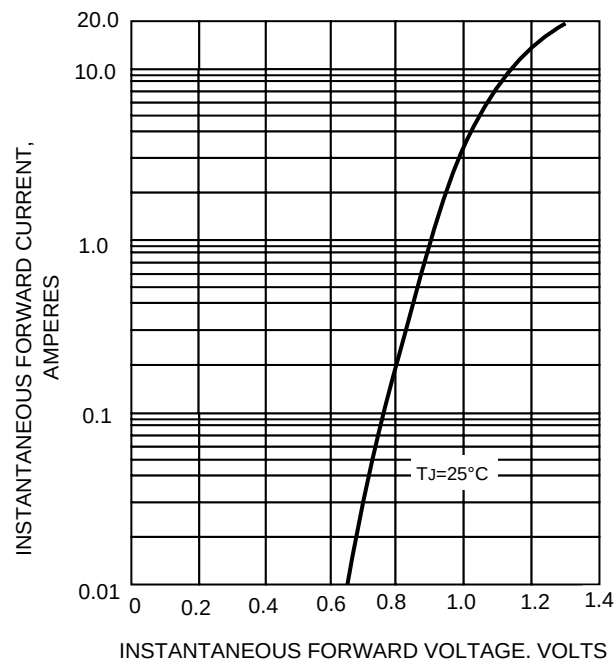


FIG.3-TYPICAL REVERSE CHARACTERISTICS

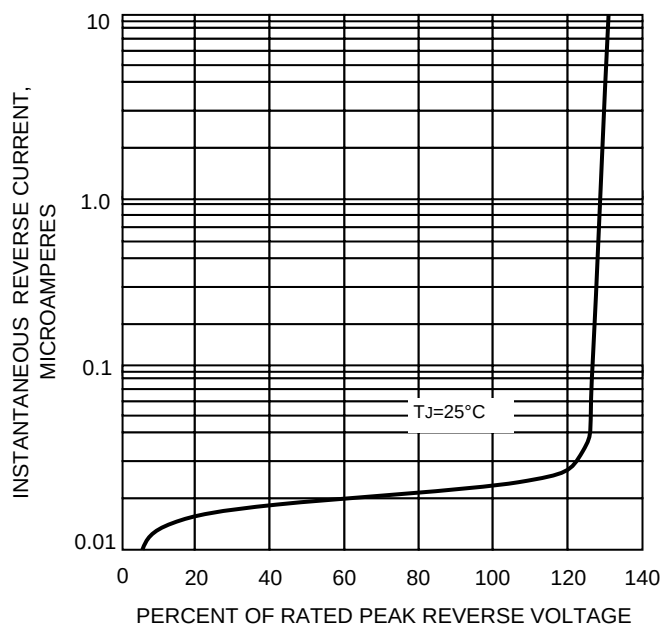
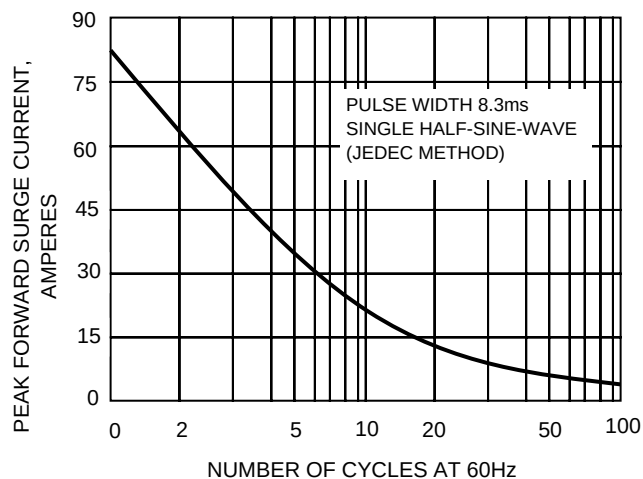
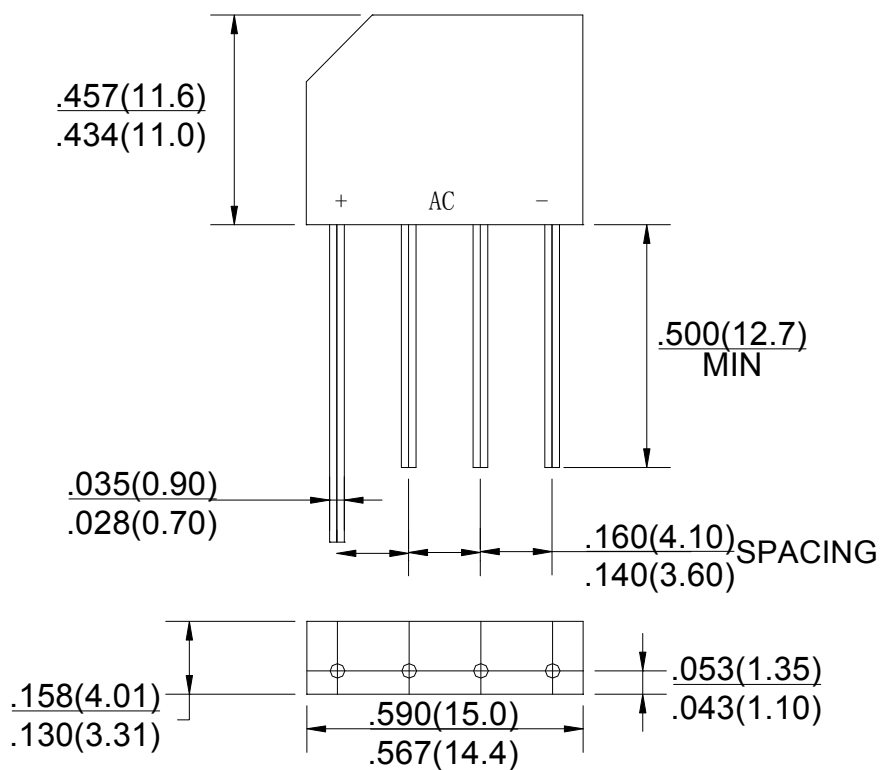


FIG.4-MAXIMUM NON-REPETITIVE SURGE CURRENT



KBP Package Outline Dimensions



Dimensions in inches and (millimeters)

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