

## KBP Plastic-Encapsulate Bridge Rectifier

**Features**

- $I_o$             2.0A
- $V_{RRM}$         50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode

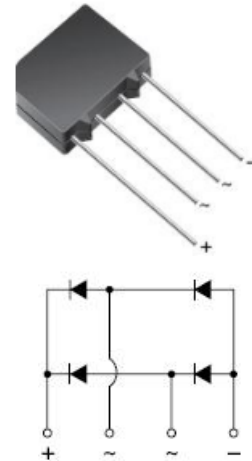
**Applications**

- General purpose 1 phase Bridge rectifier applications

**Marking**

- KBP2XX
- XX : From 005 To 10

**KBP**



**Limiting Values (Absolute Maximum Rating)**

Item	Symbol	Unit	Conditions	KBP2						
				005	01	02	04	06	08	10
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		50	100	200	400	600	800	1000
Average Rectified Output Current	$I_o$	A	60Hz sine wave, R- load, $T_a=30^{\circ}C$	2						
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz sine wave, 1 cycle, $T_a=25^{\circ}C$	60						
Current Squared Time	$I^2t$	$A^2s$	$1ms \leq t < 8.3ms$ $T_j=25^{\circ}C$ , Rating of per diode	15						
Storage Temperature	$T_{stg}$	$^{\circ}C$		-55 ~+150						
Junction Temperature	$T_j$	$^{\circ}C$		-55 ~+150						

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

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	$V_{FM}$	V	$I_{FM}=2A$ , Pulse measurement, Rating of per diode	1.1
Peak Reverse Current	$I_{RRM}$	$\mu A$	$V_{RM}=V_{RRM}$ , Pulse measurement, Rating of per diode	10
Thermal Resistance <sup>(1)</sup>	$R_{\theta J-A}$	$^{\circ}C/W$	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”(12×12mm) copper pads

■ Typical Characteristics

FIG1:  $I_o$ - $T_a$  Curve

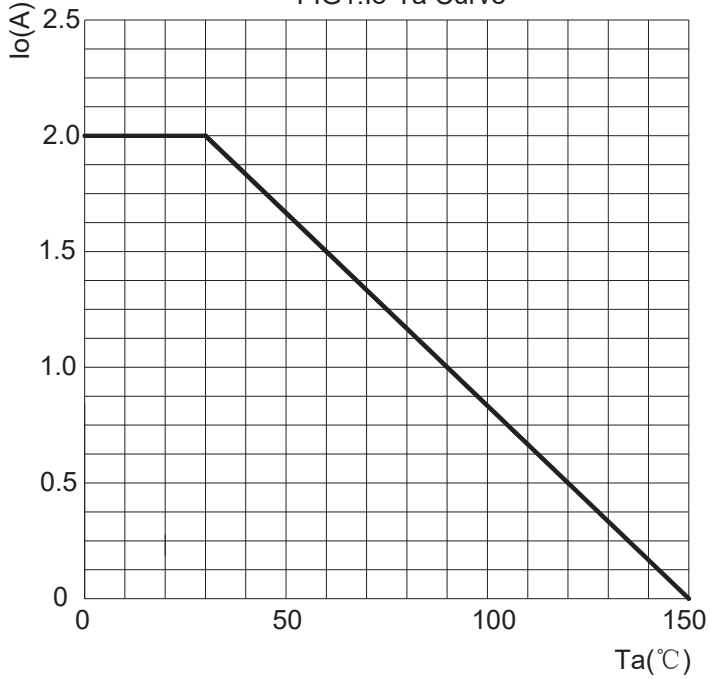


FIG2: Surge Forward Current Capability

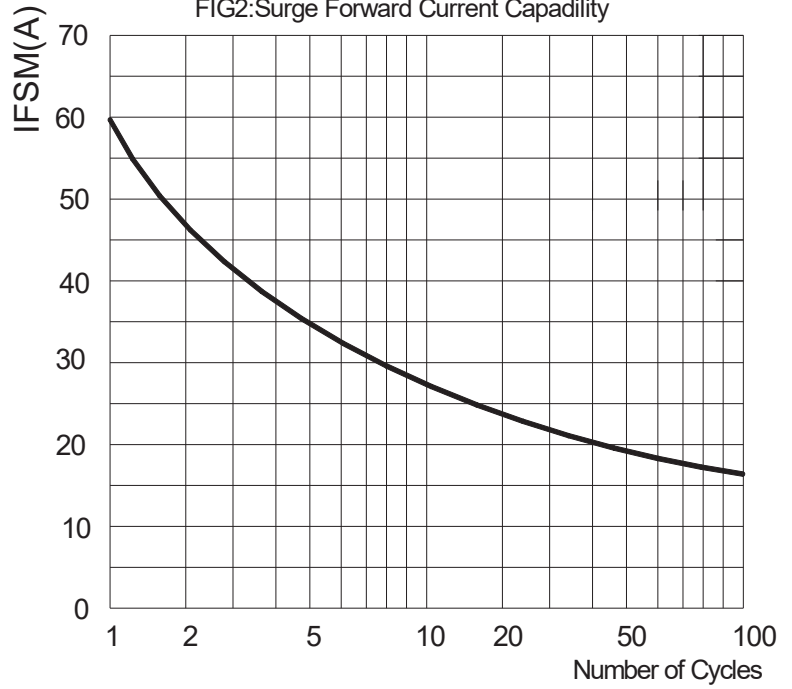


FIG3: Instantaneous Forward Voltage

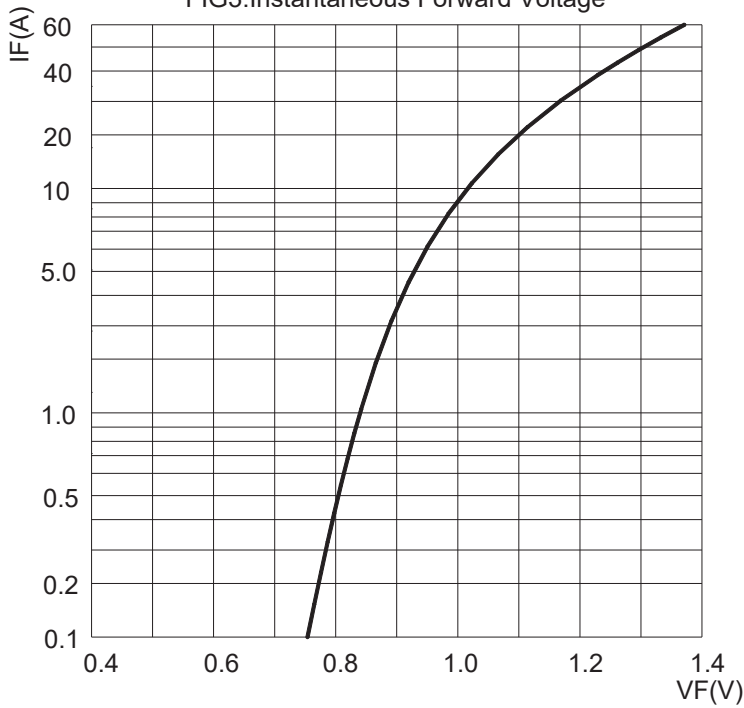
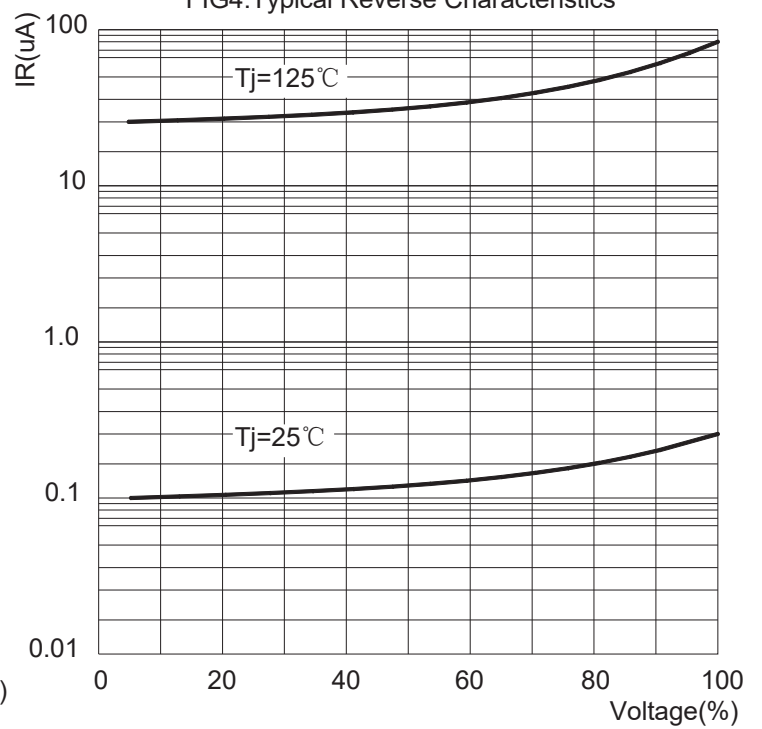
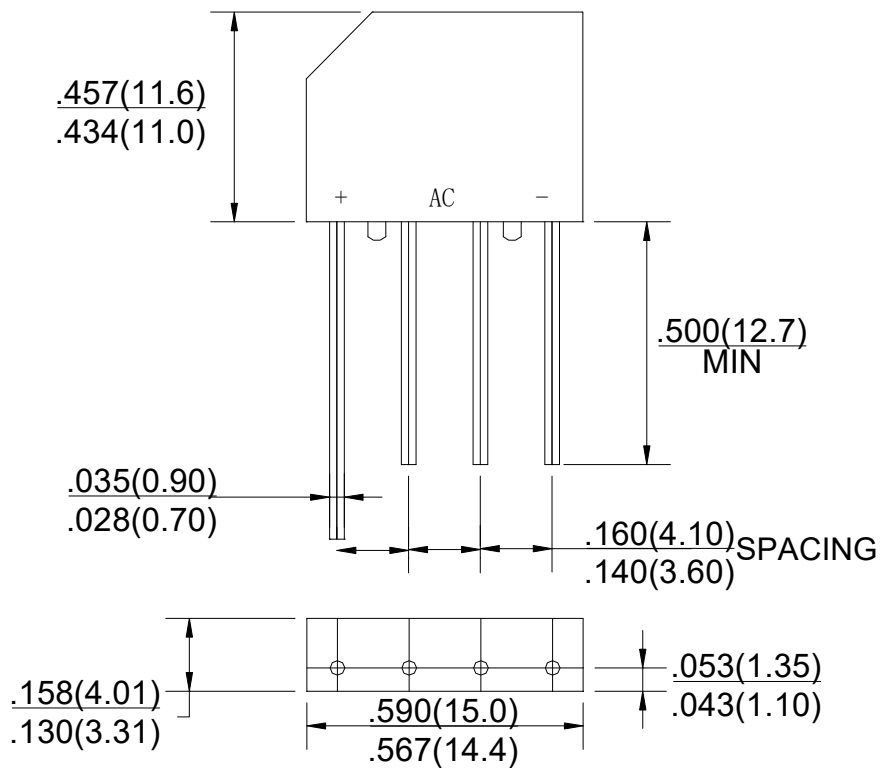


FIG4: Typical Reverse Characteristics



■ **KBP Package Outline Dimensions**



Dimensions in inches and (millimeters)