

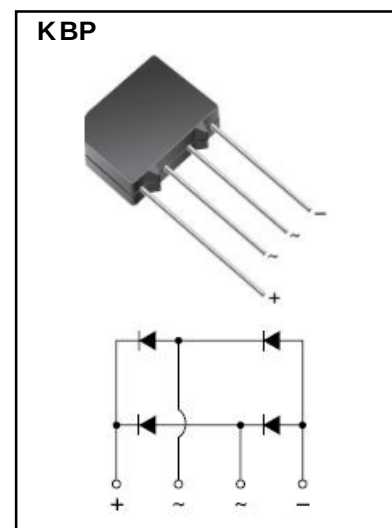
KBP Plastic-Encapsulate Bridge Rectifier

Features

- I_O 2.0A
- VRRM 50V-1000V
- High surge current capability
- Ultra low leakage reverse current
- Ideal for printed circuit boards

Mechical Data

- Case: KBP molded plastic
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Leads solderable per MIL-STD-750
- Mounting position: Any



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	KBP 2						
				005	01	02	04	06	08	10
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V		35	70	140	280	420	560	700
Maximum DC blocking Voltage	V_{DC}	V		50	100	200	400	600	800	1000
Average Rectified Output Current	I_O	A	60Hz sine wave, R-load, $T_a=50^{\circ}\text{C}$	2.0						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, $T_j=25^{\circ}\text{C}$	60						
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	14.94						
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	$I_{FM}=2.0\text{A}$, Pulse measurement, Rating of per diode		1.1
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}\text{C}$	10
	I_{RRM2}			$T_a=125^{\circ}\text{C}$	500
Thermal Resistance	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	Between junction and ambient		30
	$R_{\theta J-C}$		Between junction and lead		11

Typical Characteristics

FIG.1-DERATING CURVE
OUTPUT RECTIFIED CURRENT

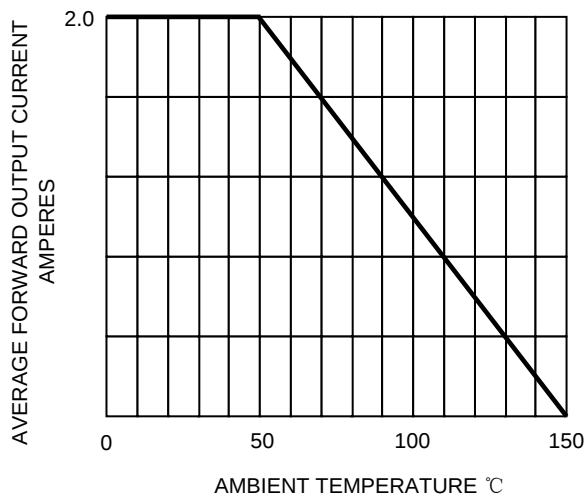


FIG.2-TYPICAL FORWARD
CHARACTERISTICS

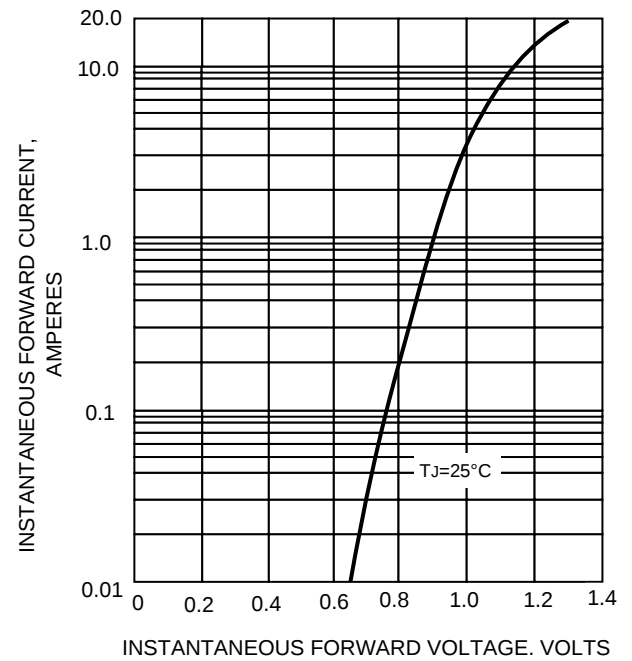


FIG.3-TYPICAL REVERSE CHARACTERISTICS

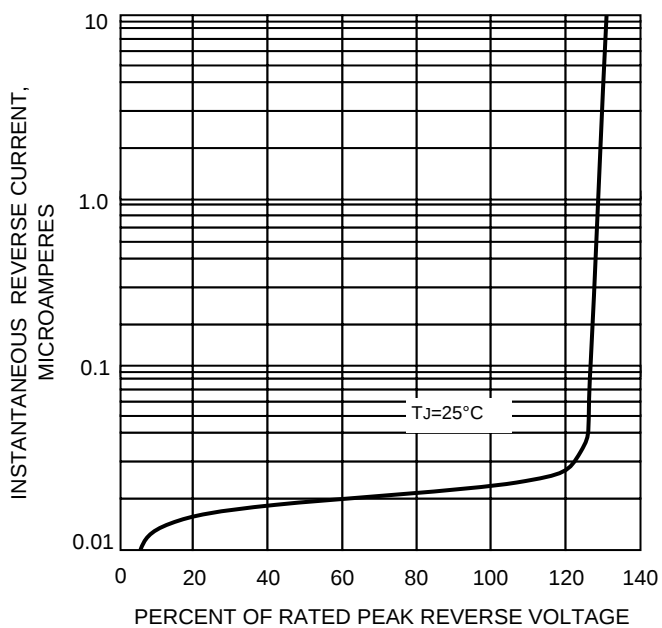
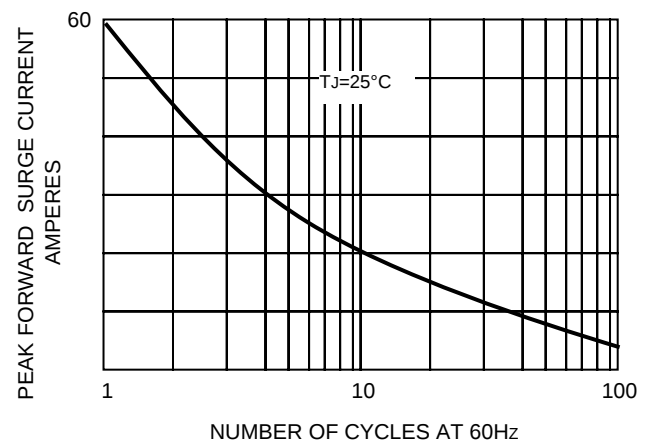
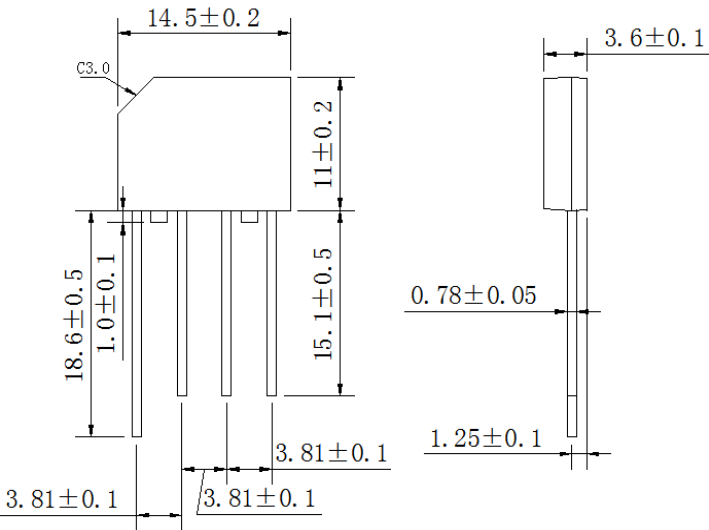


FIG.4-MAXIMUM FORWARD SURGE CURRENT



KBP Package Outline Dimensions

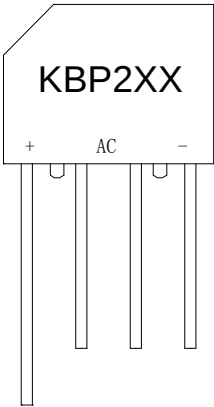


Dimensions in millimeters (1mm =0.0394")

Ordering Information

Part Number	Package	Shipping Quantity
KBP2005-KBP210	KBP	500/Box

Marking Diagram



XX: From 005 To 10