

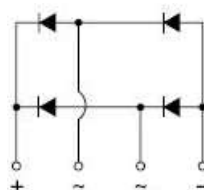
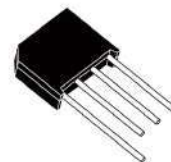
KBP Plastic-Encapsulate Bridge Rectifier

General Purpose Bridge Rectifier

Features

- I_O 3.0A
- V_{RRM} 50V-1000V
- High surge current capability
- Glass passivated chip

KBP



Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- KBP3XX
- XX : From 01 To 07

Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	KBP3						
				01	02	03	04	05	06	07
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, $T_c=100^\circ\text{C}$	3.0						
Surge(Non-repetitive) Forward Current	I_{FSM}	A	60Hz half-sine wave, 1 cycle, $T_j=25^\circ\text{C}$	90						
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	$I_{FM}=3.0\text{A}$, Pulse measurement, Rating of per diode	1.0
Peak Reverse Current	I_{RRM}	μA	$V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode	5
Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	Between junction and ambient	47
	$R_{\theta J-C}$		Between junction and case	10

Typical Characteristics

FIG.1-FORWARD CURRENT DERATING CURVE

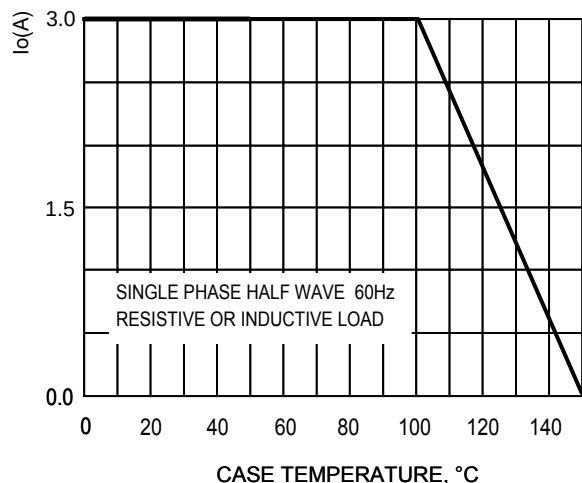


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

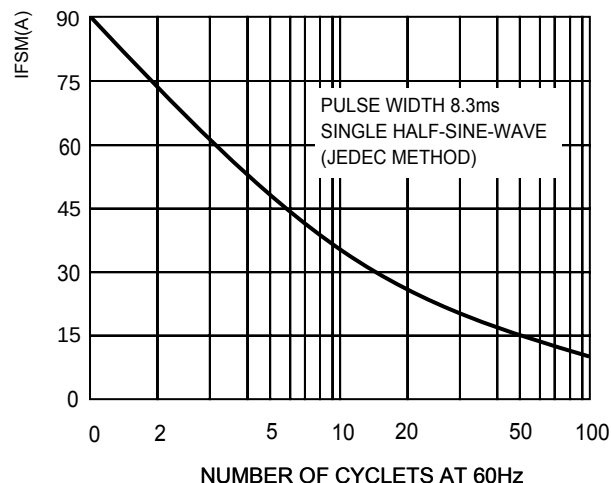


FIG.3-TYPICAL JUNCTION CAPACITANCE

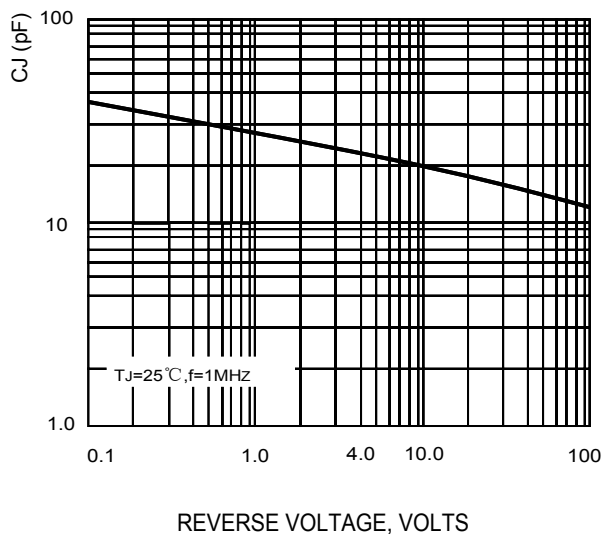


FIG.4-TYPICAL FORWARD CHARACTERISTICS

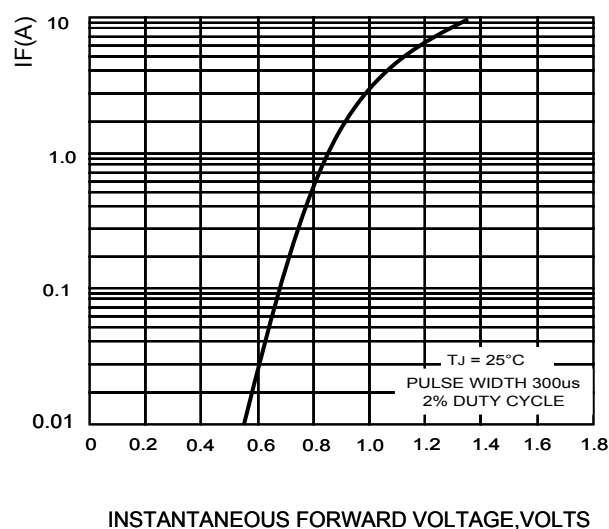
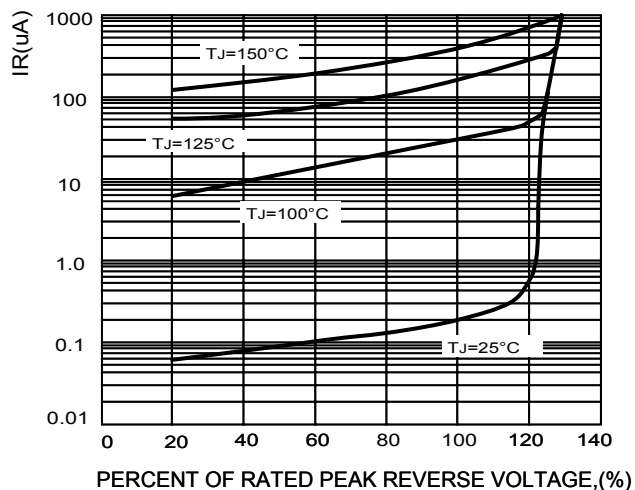
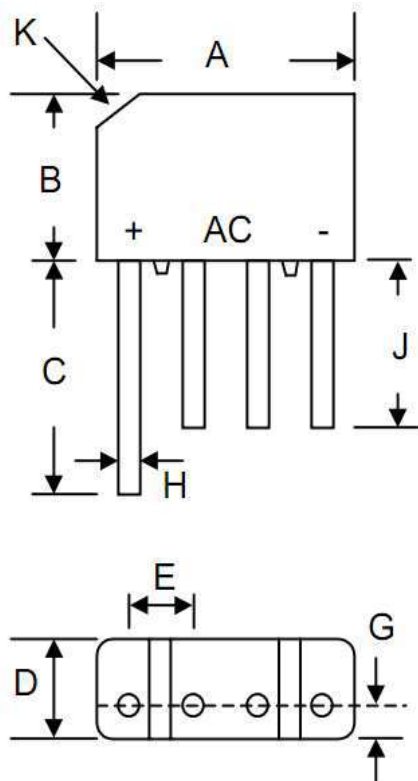


FIG.5-TYPICAL REVERSE CHARACTERISTICS



KBP Package Outline Dimensions



Dim	Max.	Min.
A	14.22	15.24
B	10.60	11.68
C	15.20	--
D	3.40	4.20
E	3.60	4.10
G	1.27	--
H	0.70	0.90
J	12.70	--
K	4.2x45 °Typical	
All Dimensions in mm		