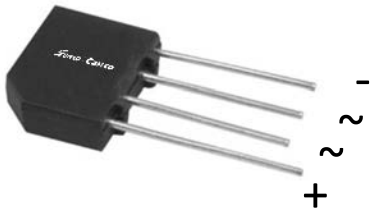


## Bridge Rectifiers

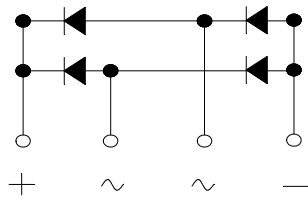


### Features

- UL recognition, file #E230084
- Glass passivated chip junction
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Typical Applications

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.



### Mechanical Data

- **Package:** KBP  
Molding compound meets UL 94 V-0 flammability rating, -
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

### ■Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210
Device marking code			KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210
Maximum Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	VRMS	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	VDC	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, T <sub>C</sub> =110°C	I <sub>O</sub>	A	2						
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave, 1 cycle, T <sub>J</sub> =25°C	I <sub>FSM</sub>	A	45						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T <sub>J</sub> =25°C			90						
Current squared time @1ms≤t≤8.3ms T <sub>J</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> s	8.4						
Storage temperature	T <sub>stg</sub>	°C	-55 ~ +150						
Junction temperature	T <sub>J</sub>	°C	-55 ~ +150						

### ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =1.0A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	μA	T <sub>J</sub> =25°C	5						
			T <sub>J</sub> =125°C	100						
Typical junction capacitance	C <sub>J</sub>	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	13						

# KBP2005 THRU KBP210

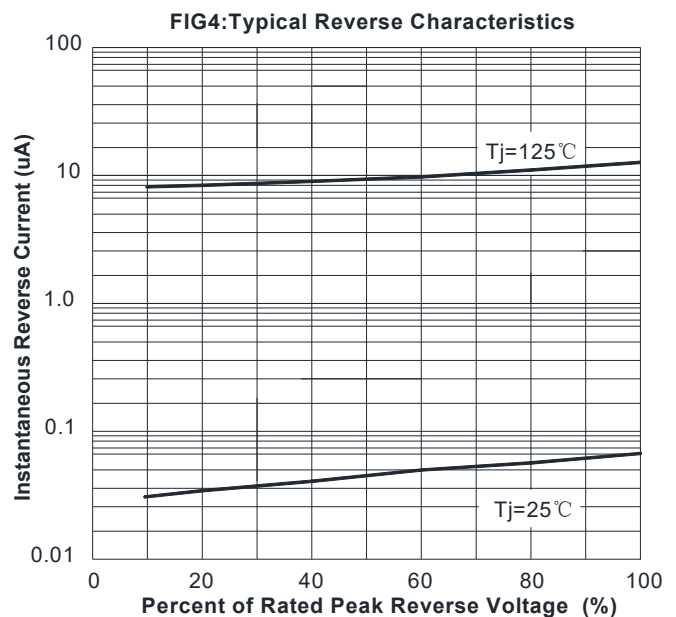
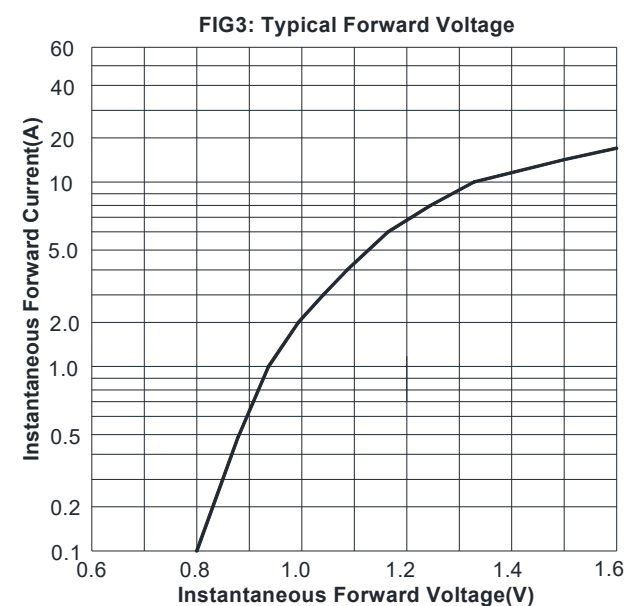
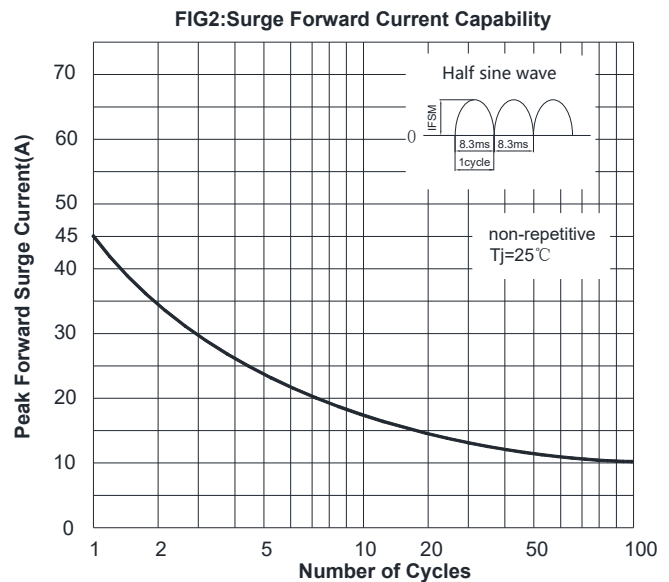
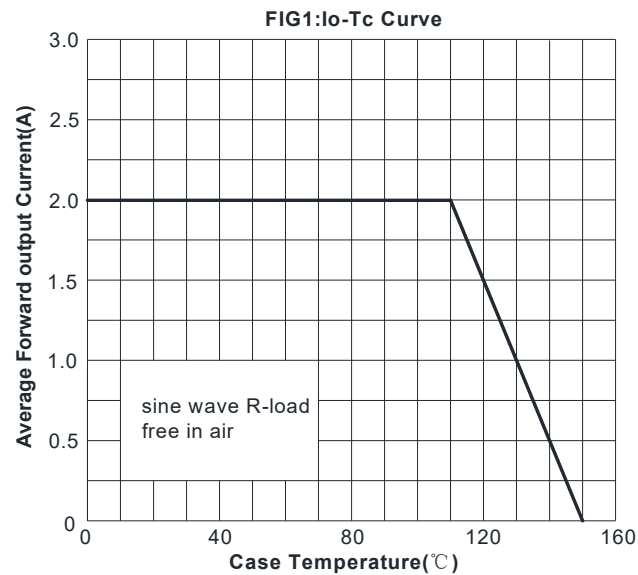
## ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210
Thermal Resistance	Between junction and ambient	R <sub>θJ-A</sub>	°C/W	30						
	Between junction and lead	R <sub>θJ-L</sub>		15						
	Between junction and case	R <sub>θJ-C</sub>		10						

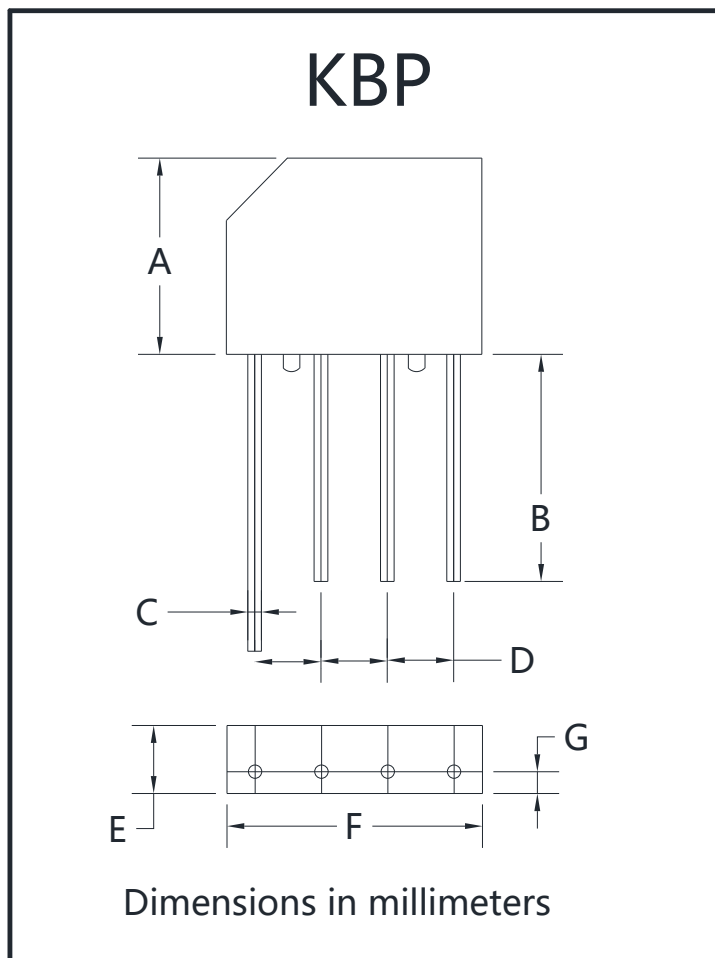
## ■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT (g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
KBP2005 ~ KBP210	A1	Approximate 1.75	500	500	5000	Paper Box

## ■ Characteristics (Typical)



■ Outline Dimensions



KBP		
Dim	Min	Max
A	11.0	11.6
B	12.7	/
C	0.7	0.9
D	3.6	4.1
E	3.7	3.95
F	14.4	15.0
G	1.10	1.27

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