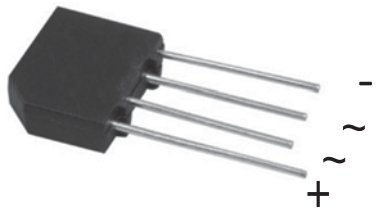
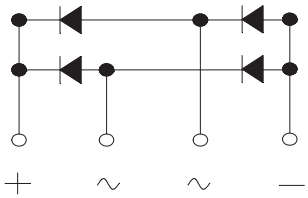
NINGBO KLS ELECTRONIC CO.,LTD.

KBP2005 THRU KBP210

Bridge Rectifiers

RoHS COMPLIANT





Features

- UL recognition, file #E230084
- 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, RoHS-compliant
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■Maximum Ratings (T_a=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210
Device marking code			KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210
Repetitive peak reverse voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, Without heatsink ,T_a =30℃	I_O	A	2						
Surge(non-repetitive)forward current @60HZ half-sine wave, 1 cycle, T_a=25℃	I_{FSM}	A	45						
Current squared time @1ms≤t<8.3ms Tj=25℃, rating of per diode	I^2t	A^2S	8.4						
Storage temperature	T_{stg}	℃	-55 ~+150						
Junction temperature	T_j	℃	-55 ~+150						

■Electrical Characteristics (T_a=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=1.0A	1.05						
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM}	μA	V_{RM}=V_{RRM}	10						

■Thermal Characteristics (T_a=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210
Thermal Resistance (1)	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	℃/W	30						
	Between junction and lead	$R_{\theta J-L}$		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

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■Ordering Information (Example)

PREFERED 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)

FIG1:Io-Ta Curve

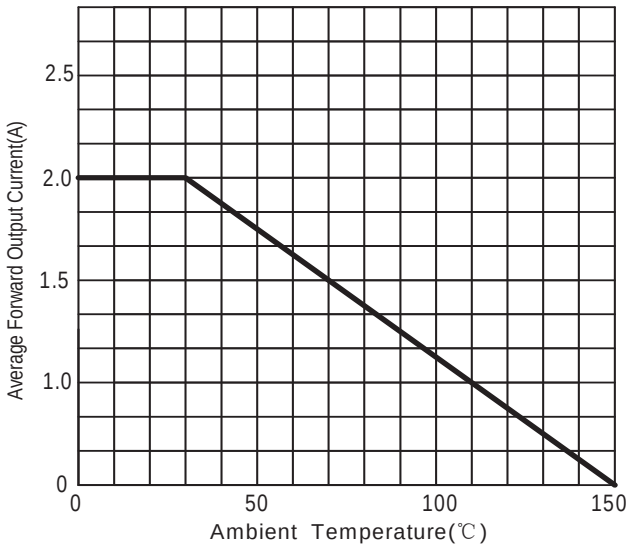


FIG2:Surge Forward Current Capability

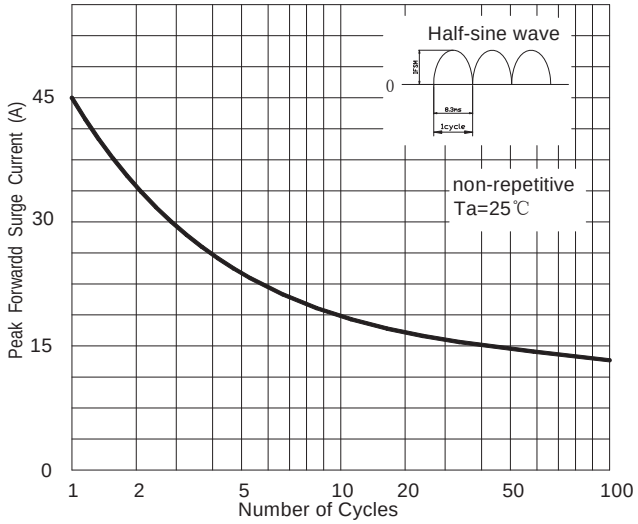


FIG3:Instantaneous Forward Voltage

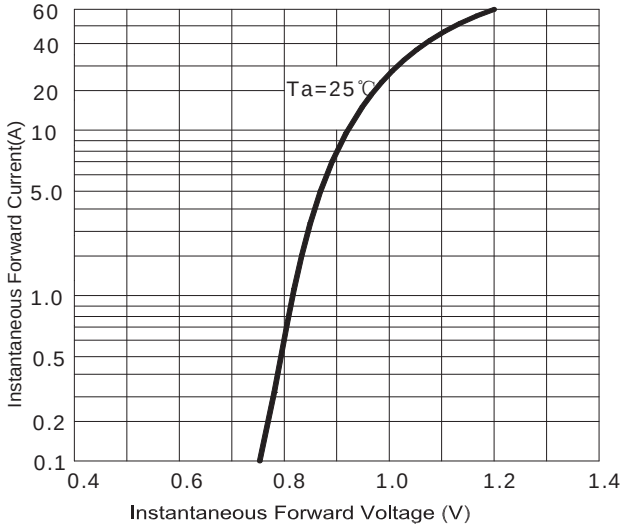
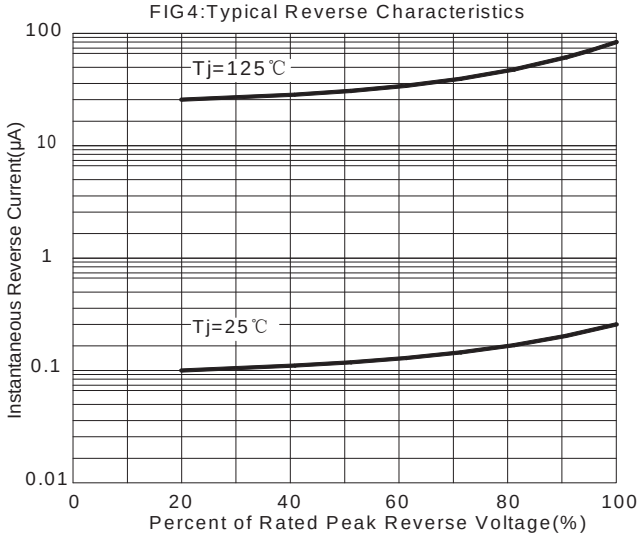


FIG4:Typical Reverse Characteristics



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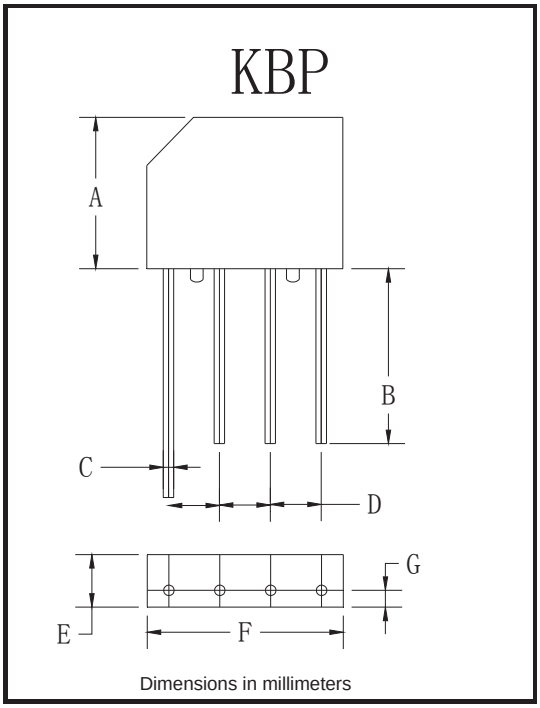
■ Outline Dimensions



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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