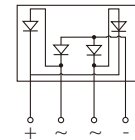
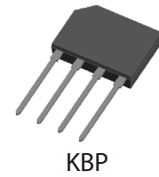


FEATURES

- | Low profile package
- | Idea for printed circuit board
- | Glass passivated Junction chip
- | High forward surge current capability
- | Low reverse leakage



Schematic Symbol

MECHANICAL DATA

- | Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- | Moisture Sensitivity: Level 1 per J-STD-020
- | Polarity: Cathode line denotes the cathode end

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS AND CHARACTERISTICS (T_A=25°C)

Parameter	Symbol	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	Unit
Marking		KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Average rectified output current @60Hz sine wave, R-load, T _c = 122 °C	I _O				2.0				A
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _j =25 °C	I _{FSM}				60				A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25 °C					120				A
Current squared time @1ms ≤ t ≤ 8.3ms T _j =25 °C, Rating of per diode	I ² t				15				A ² s
Dielectric strength @ terminals to case, AC 1 minut	V _{dis}				2				KV
Maximum instantaneous forward voltage drop per diode I _{FM} =1.0A	V _F				1.0				V
Maximum DC reverse current at rated DC blocking voltage per diode	I _R				5				uA
					100				uA
Typical junction capacitance Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C _j				26				pF
Thermal Resistance Between junction and ambient	R _{θJ-A}				45				°C/W
Thermal Resistance Between junction and Case	R _{θJ-C}				7				°C/W
Operating junction and storage temperature rang	T _J , T _{STG}				-55 ~ +150				°C

CHARACTERISTIC CURVES

Fig. 1- I_o-T_c Curve

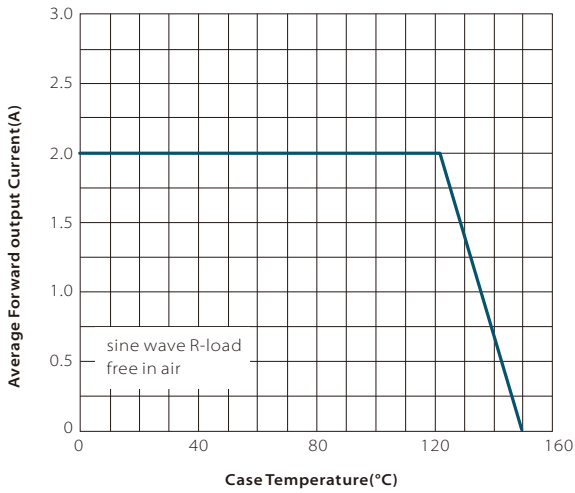


Fig. 2-Surge Forward Current Capability

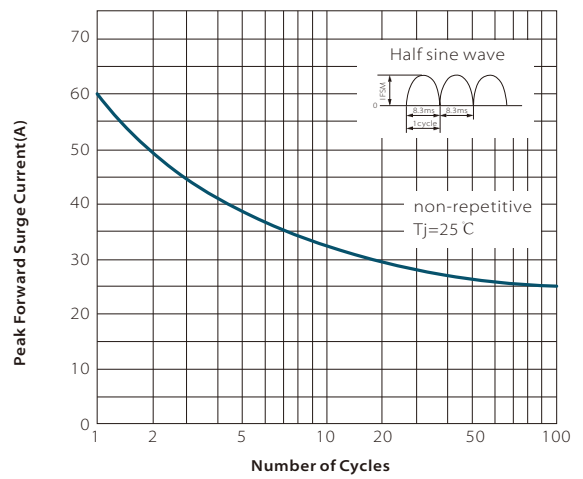


Fig. 3-Typical Forward Voltage

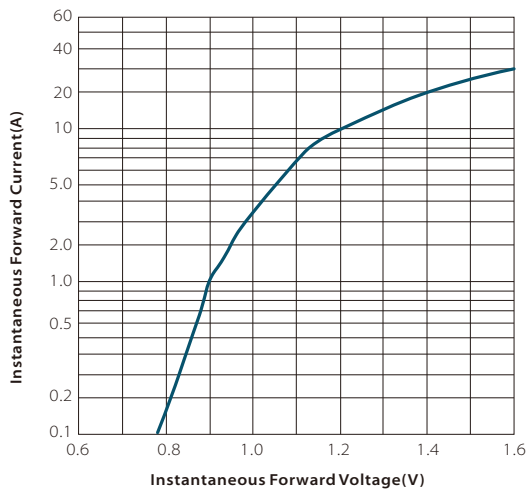
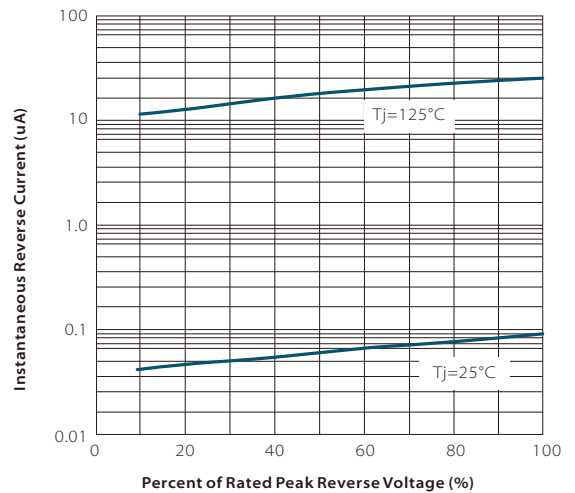
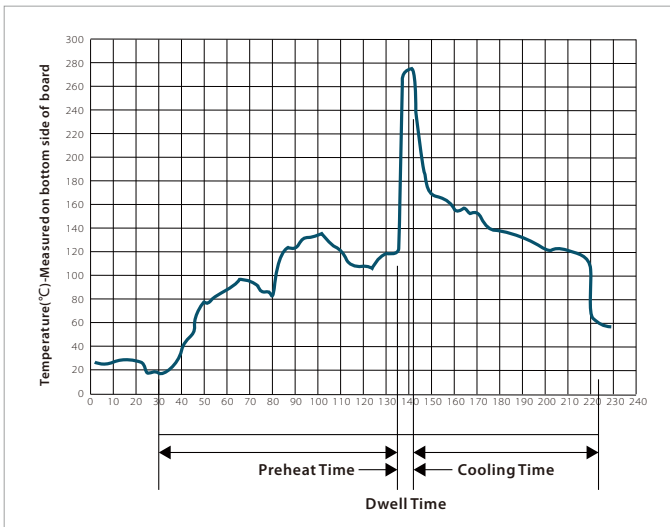


Fig. 4-Typical Reverse Characteristics

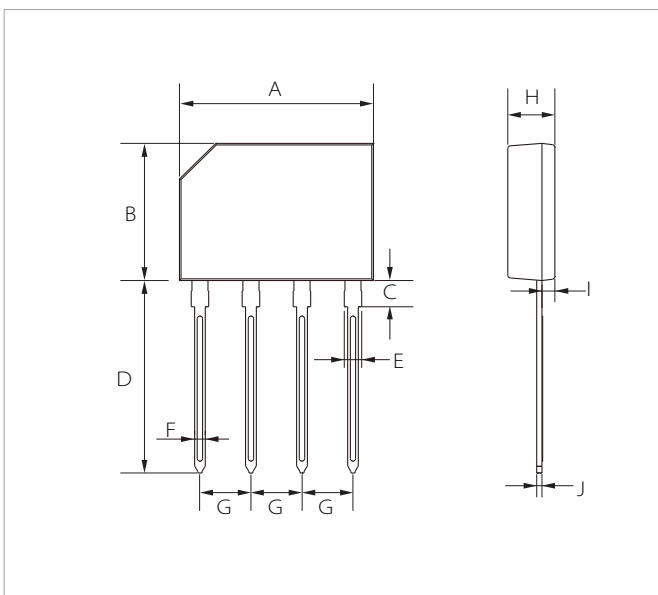


WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

KBP PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	14.25	14.75	0.561	0.581
B	10.10	10.60	0.398	0.417
C	1.80	2.20	0.071	0.087
D	14.25	14.73	0.561	0.580
E	1.22	1.42	0.048	0.056
F	0.76	0.86	0.030	0.034
G	3.70	3.90	0.146	0.153
H	3.35	3.65	0.132	0.144
I	0.80	1.10	0.031	0.043
J	0.35	0.55	0.014	0.022

ORDERING INFORMATION

Part Number	Component Package	Per Box	Description
KBP2005-KBP210	KBP	500PCS	Box

To find your local partner within Semiwell's website : www.semiwell.com.cn

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