

Silicon Bridge Rectifiers

KBP2005--KBP210

FEATURES

- Rating to 1000V PRV
- Surge overload rating to 50 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208
- Plastic material has UL flammability classification 94V-O
- Glass passivated chip junctions



Lead-free

Maximum Ratings (@T_A = 25°C unless otherwise specified)

Characteristic	Symbol	KBP 2005	KBP 201	KBP 202	KBP 204	KBP 205	KBP 206	KBP 207	KBP 208	KBP 210	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	500	600	700	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	350	420	490	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	500	600	700	800	1000	V
Maximum average forward Output current @T _A =25°C	I _{F(AV)}	2.0									A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I _{FSM}	50									A

Thermal Characteristics

Characteristic	Symbol	KBP 2005	KBP 201	KBP 202	KBP 204	KBP 205	KBP 206	KBP 207	KBP 208	KBP 210	UNITS
Thermal Resistance	R _{θJA} R _{θJL}	30 11									°C/W
Current squared time	I ² t	20									A ² s
Operating junction temperature range	T _J	- 55 ---- + 125									°C
Storage temperature range	T _{STG}	- 55 ---- + 150									°C

Electrical Characteristics (@T_A = 25°C unless otherwise specified)

Characteristic	Symbol	KBP 2005	KBP 201	KBP 202	KBP 204	KBP 205	KBP 206	KBP 207	KBP 208	KBP 210	UNITS
Maximum instantaneous forward voltage @2.0A	V _F	1.1									V
Maximum reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I _R	10 1.0									μA mA



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PACKAGE OUTLINE DIMENSIONS

KBP		
Dim	Min	Max
A	14.50	14.90
A1	1.60 Typical	
B	11.10	11.50
B1	1.00 Typical	
C	3.60	3.90
C1	1.20 Typical	
E	Ø0.70	Ø0.90
F	13.00min	
F1	2.00min	
K	3.40	4.00
All Dimensions in mm		

PACKAGE INFORMATION

Device	Package	Shipping
KBP2005--KBP210	KBP	500 Units/Box

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FIG.1 – PEAK FORWARD SURGE CURRENT

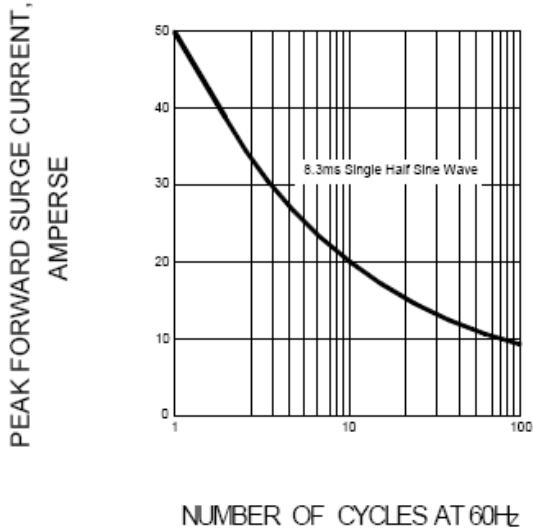


FIG.2 – FORWARD DERATING CURVE
OUTPUT RECTIFIED CURRENT

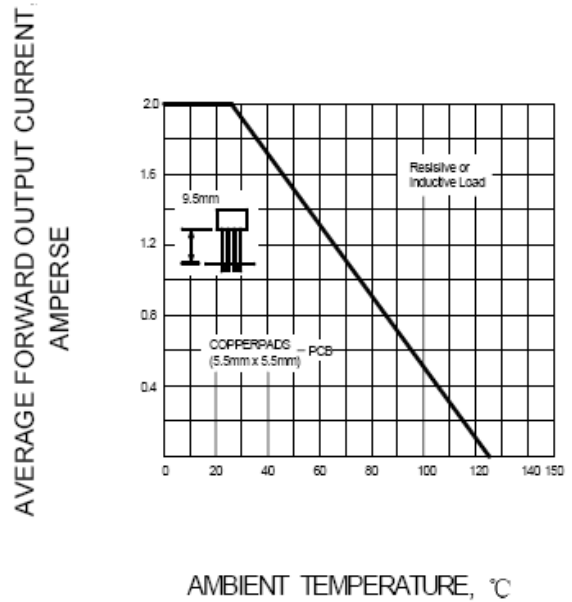


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

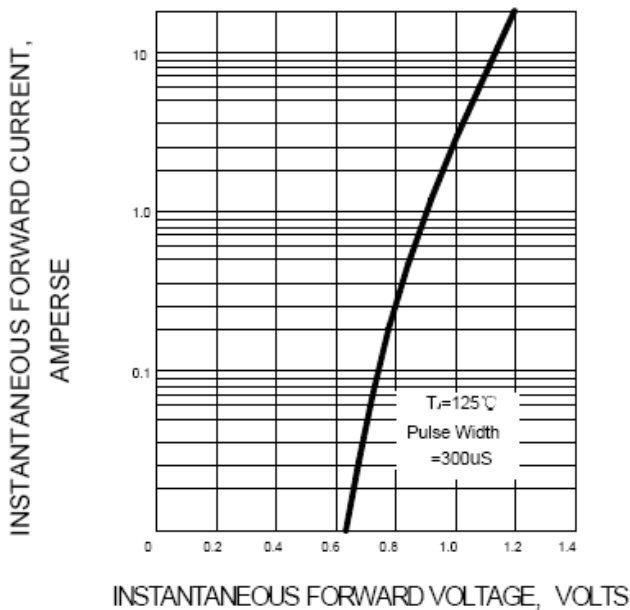


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

