

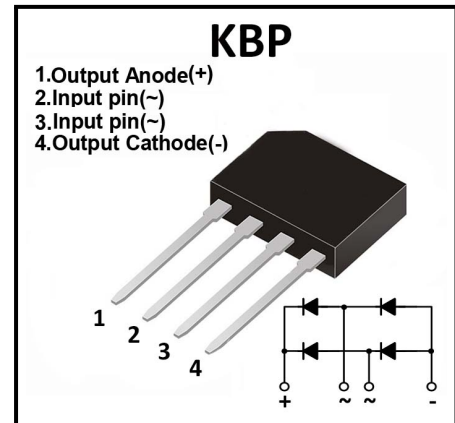
KBP6005-KBP610/G

Single Phase 6.0Amp Glass passivated Bridge Rectifiers

Features

- Rating to 1000V PRV
- Idea for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V-0
- The G suffix is uses for photoresist chip, otherwise it is a knife scraping chip

Package



MECHANICAL DATA

- Polarity : As marked on body
- Weight : 0.05 ounces, 1.52 grams
- Mounting position : Any

Maximum Ratings And Electrical Characteristics (@T_A=25°C unless otherwise noted)

Symbol	Parameter	KBP 6005	KBP 601	KBP 602	KBP 604	KBP 606	KBP 608	KBP 610	Unit	
V _{RRM}	Maximum repetitive peak reverse voltage	50	100	200	400	600	800	1000	V	
V _{RMS}	Maximum RMS voltage	35	70	140	280	420	560	700	V	
V _{DC}	Maximum DC blocking voltage	50	100	200	400	600	800	1000	V	
I _{AV}	Maximum average forward rectified(With heatsink) current @T _C =105°C(Without heatsink)					6.0 3.0				A
I _{FSM}	Peak Forward Surge Current@T _J =25°C 8.3ms single half sine-wave @T _J =125°C					150 120				A
V _F	Maximum forward voltage at 6.0A DC					1.10				V
I _R	Maximum DC reverse current@T _J =25°C at rated DC blocking voltage @T _J =125°C					5.0 500				uA
I _t ²	I _t ² Rating for fusing (3ms≤t≤8.3ms)					93.38				A _S ²
C _J	Typical junction capacitance (Note 1)					46				pF
R _{θJC}	Typical thermal resistance (Unit mounted on 30mmx30mmx1mm Copper plate heatsink.)					3.0				°C/W
R _{θJC}	Typical thermal resistance (without heatsink)					8.0				°C/W
T _J	Operation Temperature Range					-55 to +150				°C
T _{STG}	Storage Temperature Range					-55 to +150				

Note:(1)Measured at 1MHz and applied reverse voltage of 4.0V D.C.



Ratings And Characteristic Curves

Figure 1: FORWARD CURRENT DERATING CURVE

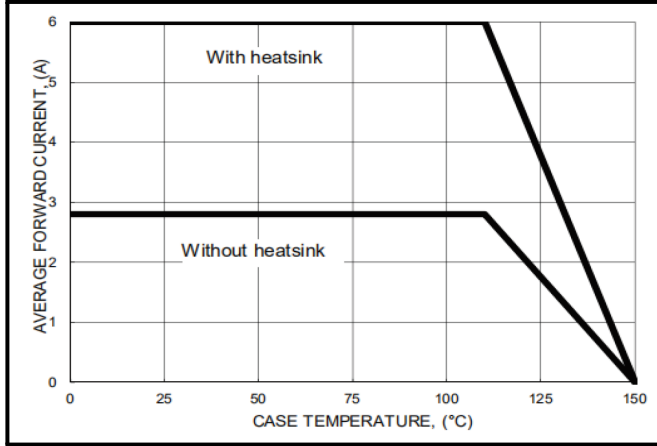


Figure 2: MAXIMUM NON-REPETITIVE SURGE CURRENT

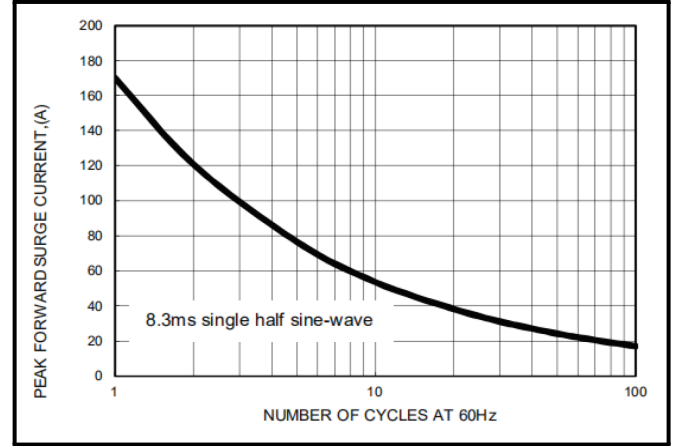


Figure 3: TYPICAL JUNCTION CAPACITANCE

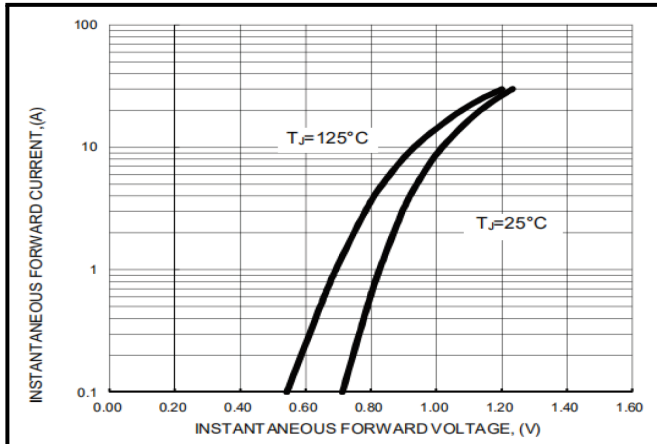


Figure 4: TYPICAL FORWARD CHARACTERISTICS

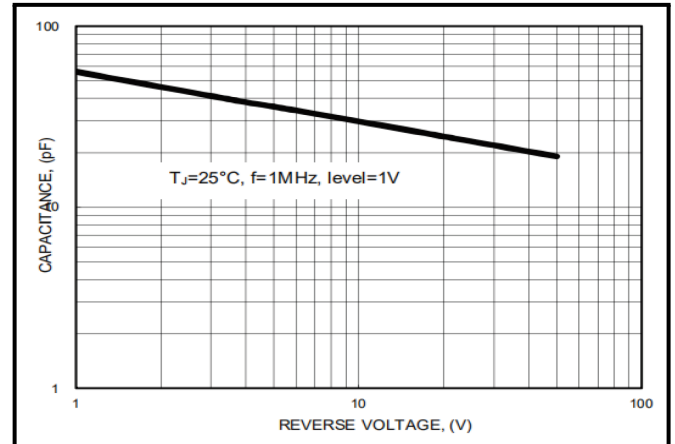
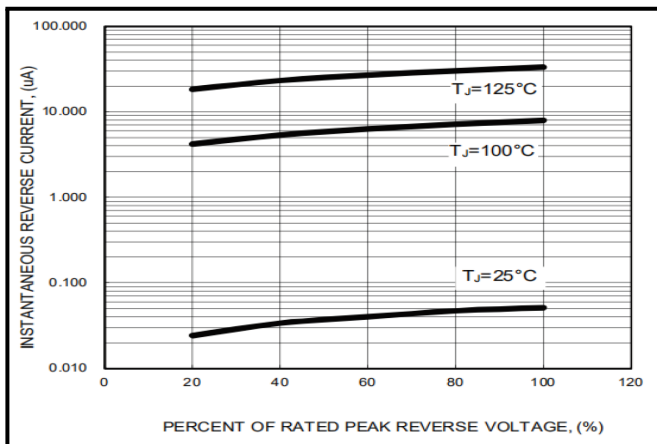


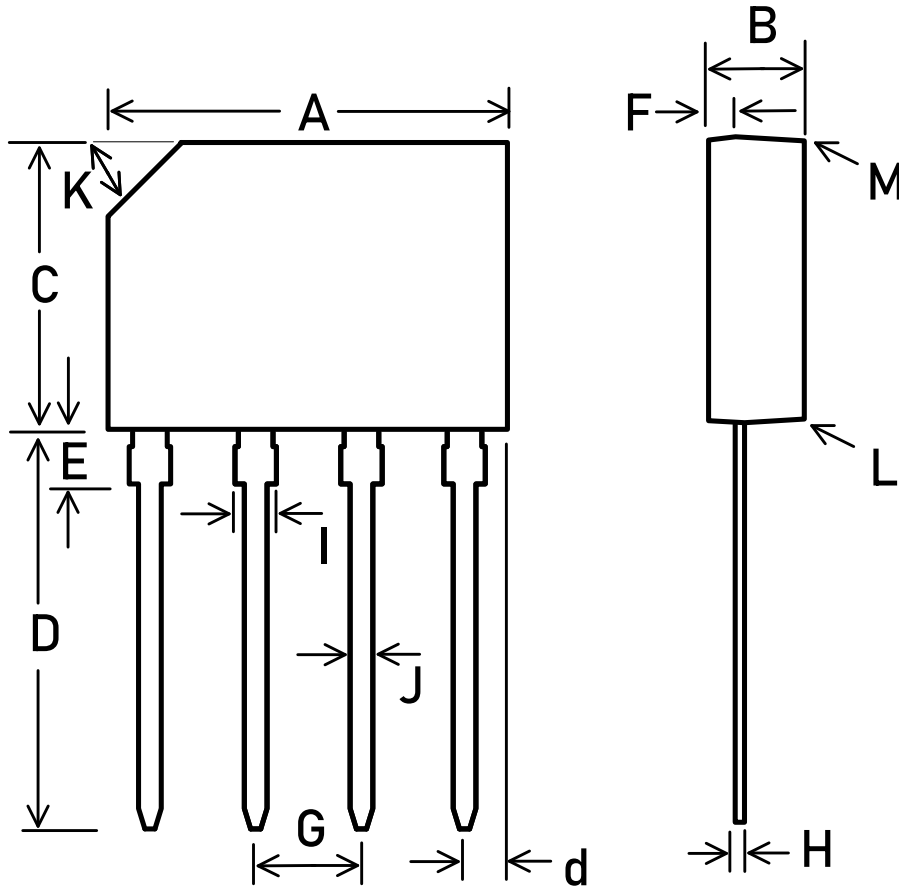
Figure 5: TYPICAL REVERSE CHARACTERISTICS



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Outline Drawing -KBP



SYMBOL	MILLIMETER	
	MIN.	MAX.
A	14.2	14.7
B	3.30	3.60
C	10.2	10.6
D	13.8	14.4
d	1.40	1.70
E	1.80	2.20
F	0.80	1.10
G	3.71	3.91
H	0.30	0.55
I	1.22	1.42
J	0.76	0.86
K	2.7 x 45°	
L	-	3°
M	-	2°

