



## GLASS PASSIVATED BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 V

Forward Current - 4.0 A

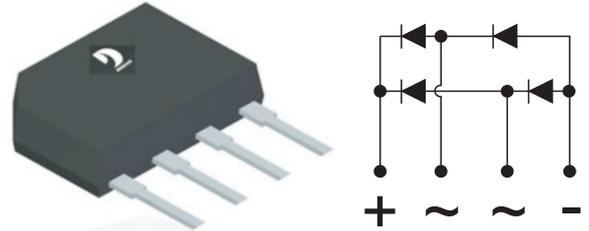
## KBP-C5.5

### FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V#0

### MECHANICAL DATA

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



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	KBP 4005 -C5.5	KBP 401 -C5.5	KBP 402 -C5.5	KBP 404 -C5.5	KBP 406 -C5.5	KBP 408 -C5.5	KBP 410 -C5.5	Units	
Maximum Recurrent 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	
Maximum Average Forward Rectified Current @TC=105°C <small>(With heatsink) (Without heatsink)</small>	$I_{(AV)}$					4.0 2.0				A
Peak Forward Surge Current 8.3ms single half sine-wave	$I_{FSM}$					75				A
Maximum Forward Voltage at 4.0A DC	$V_F$					1.1				V
Maximum DC Reverse Current at rated Blocking Voltage <small><math>T_a = 25^\circ\text{C}</math> <math>T_a = 125^\circ\text{C}</math></small>	$I_R$					5 500				$\mu\text{A}$
$I^2t$ Rating for fusing (3ms $\leq t \leq$ 8.3ms)	$I^2t$					23.3				$\text{A}^2\text{s}$
Typical Junction Capacitance per element (Note 1)	$C_j$					45				pF
Typical thermal resistance (Unit mounted on 3.81*3.81cm*4 Copper pad.)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$					51 7 20				$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_j$					-55 ~ +150				$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$					-55 ~ +150				$^\circ\text{C}$

Note: (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.



Fig.1 Forward Current Derating Curve

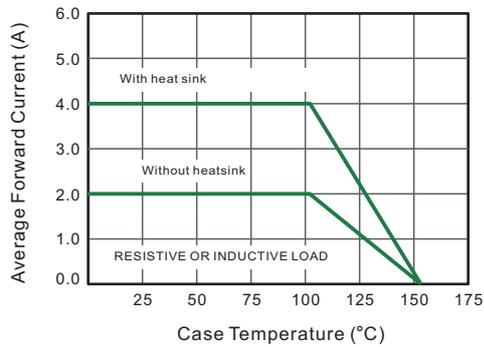


Fig.2 Typical Instaneous Reverse Characteristics

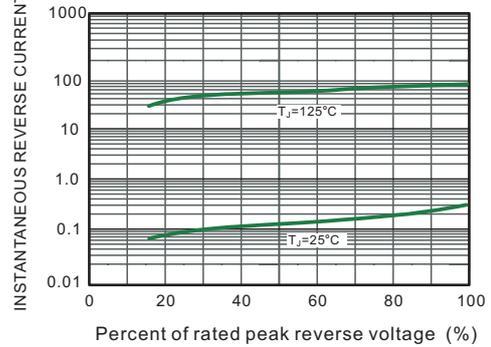


Fig.3 Typical Forward Characteristic

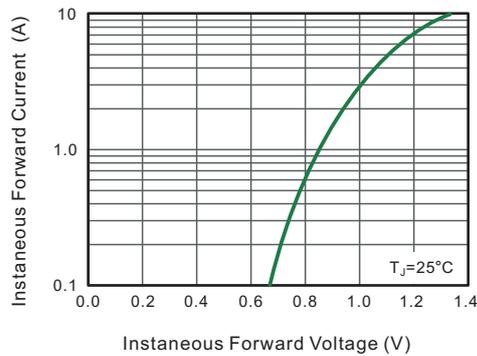


Fig.4 Typical Junction Capacitance

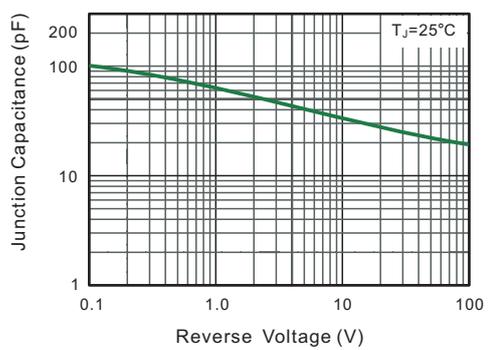


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

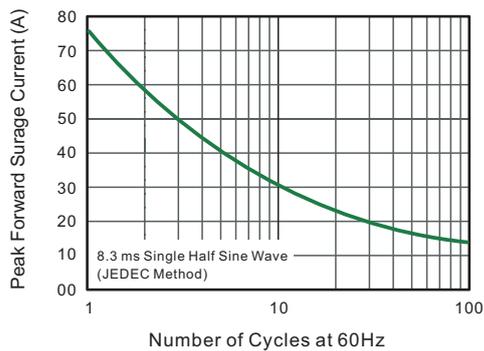
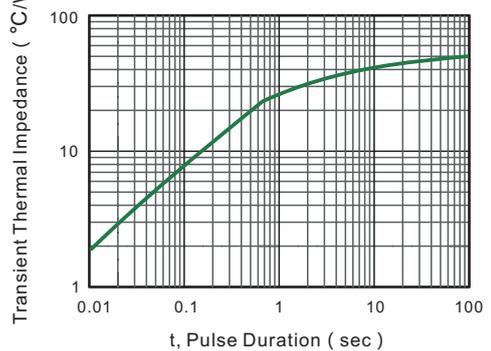
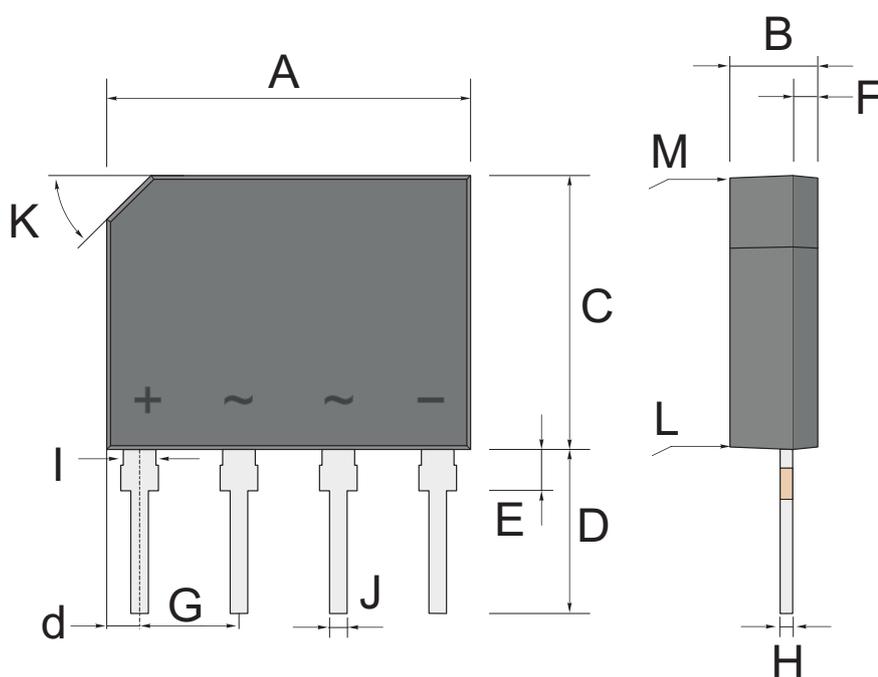


Fig.6- Typical Transient Thermal Impedance





### KBP-C5.5 Package Outline Dimensions



KBP-C5.5		
DIM.	MIN.	MAX.
A	14.25	14.75
B	3.35	3.65
C	10.20	10.60
D	5.0	6.0
d	1.40	1.70
E	1.80	2.20
F	0.80	1.10
G	3.56	4.06
H	0.35	0.55
I	1.22	1.42
J	0.76	0.86
K	2.7X45°(typ)	
L	#	3°
M	#	2°
All dimensions in millimeter		

Unit : mm

山东晶导微电子股份有限公司

SHANDONG JINGDAO MICROELECTRONICS CO.LTD

地址：山东省济宁市曲阜市春秋东路166号

电话：0537-4613079

邮箱：sales@sdjingdao.com

网站：www.sdjingdao.com