

KBP4005G~KBP410G

Rev.A Sep.-2019

描述 / Descriptions

玻璃钝化整流桥，反向电压：50~1000V，正向电流：4.0A，KBP 封装。

Glass Passivated Bridge Rectifiers, Reverse Voltage:50~1000V,Forward Current:4.0A,KBP package.

特征 / Features

优化 PCB 板选择，塑料模具外壳，塑料的 UL 易燃性等级为 94V-0。无卤产品。

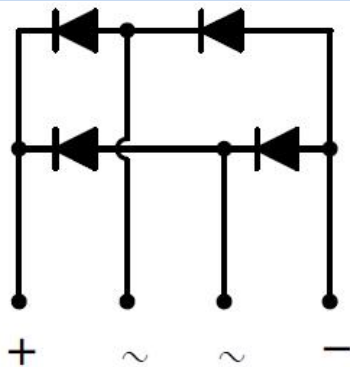
Ideal for printed circuit board, Case material molded plastic, The plastic material has U/L flammability classification 94V-0. Halogen free product.

用途 / Applications

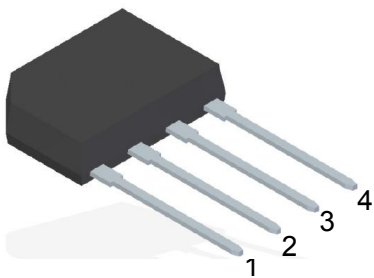
一般用途。

General purpose.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1 : DC+ PIN2 : AC PIN3 : AC PIN4 : DC-

放大及印章代码 / h_{FE} Classifications & Marking

见印章说明。 See Marking Instructions


极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating							单位 Unit
		KBP 4005G	KBP 401G	KBP 402G	KBP 404G	KBP 406G	KBP 408G	KBP 410G	
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
Maximum Average Forward Rectified Current @TC=105°C (With heatsink) (Without heatsink)	I _(AV)	4.0 2.0							A
Peak Forward Surge Current @ Tj = 25 °C 8.3ms single @ TJ = 125°C half sine-wave	I _{FSM}	130 110							A
Peak Forward Surge Current @ Tj =25 °C 1.0ms single @ TJ=125°C half sine-wave	I _{FSM}	260 220							A
I ² t Rating for fusing (3ms≦t ≦ 8.3ms)	I ² t	50							A ² s
Typical Junction Capacitance per element (Note 1)	CJ	40							pF
Typical thermal resistance (Unit mounted on 75mmx75mmx1.6mm Copper plate heatsink.)	R _{θJC}	6							°C/ W
	R _{θJL}	8							
	R _{θJA}	15							
Typical thermal resistance (without heatsink)	R _{θJC}	14							°C/ W
	R _{θJL}	20							
	R _{θJA}	40							
Operation and Storage Temperature Range	T _j 、 T _{stg}	-55 to +150							°C

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

电性能参数 / Electrical Characteristics(Ta=25°C)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating	单位 Unit
Maximum Forward Voltage	V_F	$I_F=4.0A$	1.1	V
Maximum DC Reverse Current at rated Blocking Voltage	I_R	@Tj=25°C	5.0	μA
		@Tj=125°C	500	

电参数曲线图 / Electrical Characteristic Curve

FIG.1- FORWARD CURRENT DERATING CURVE

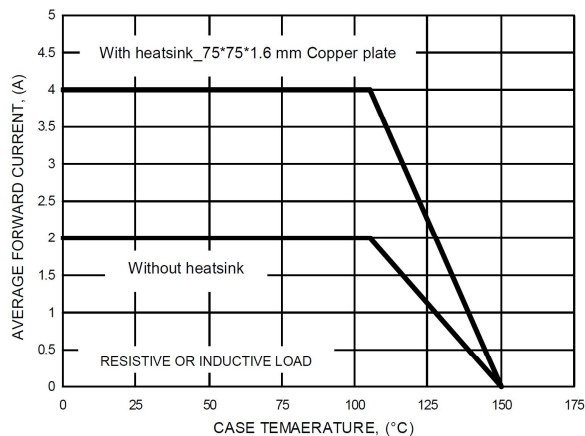


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

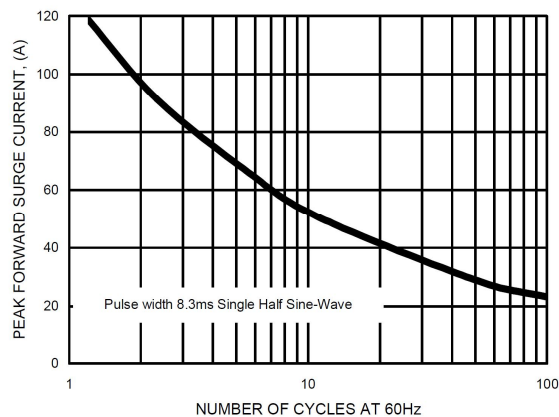


FIG.3- TYPICAL JUNCTION CAPACITANCE

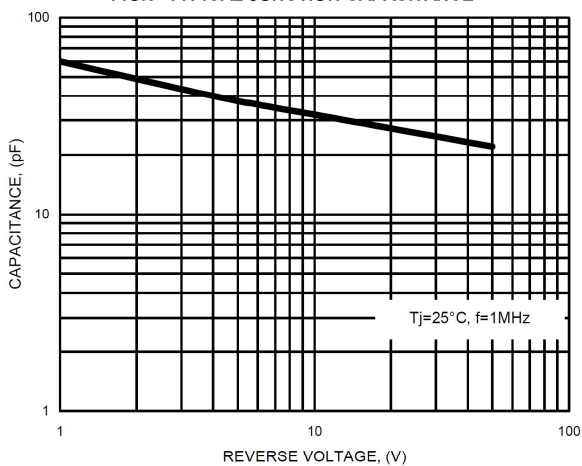


FIG.4- TYPICAL FORWARD CHARACTERISTICS

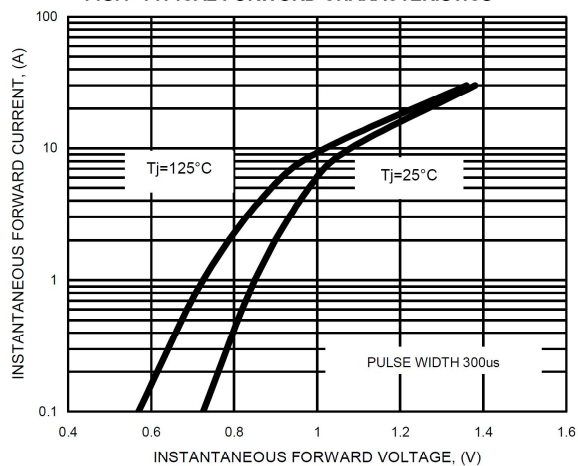
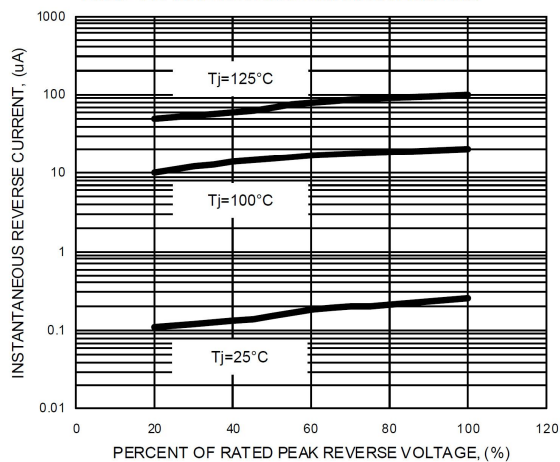
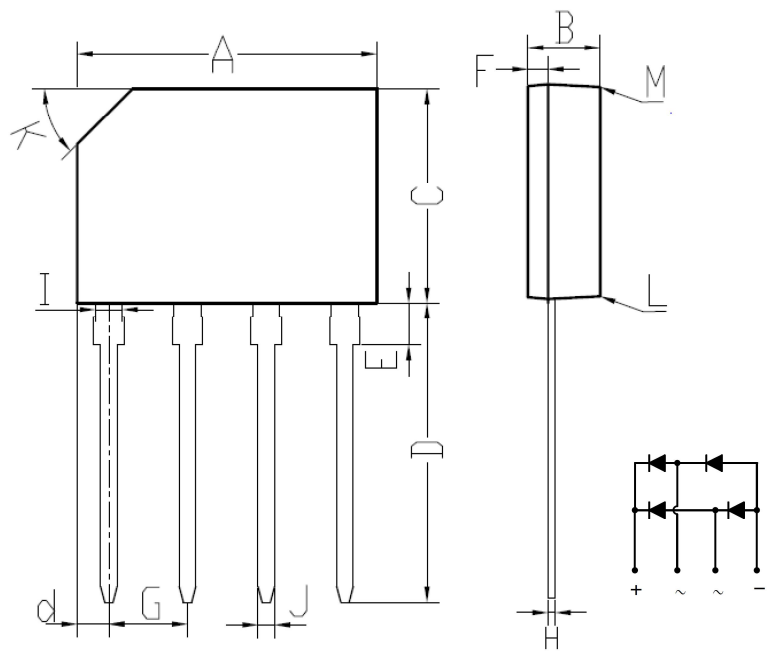


FIG.5- TYPICAL REVERSE CHARACTERISTICS



外形尺寸图 / Package Dimensions

KBP Package Outline Dimensions



KBP		
DIM.	MIN.	MAX.
A	14.25	14.75
B	3.35	3.65
C	10.20	10.60
D	14.25	14.73
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	2.7 x 45° (Typ)	
L	#	3°
M	#	2°
All Dimensions in millimeter		

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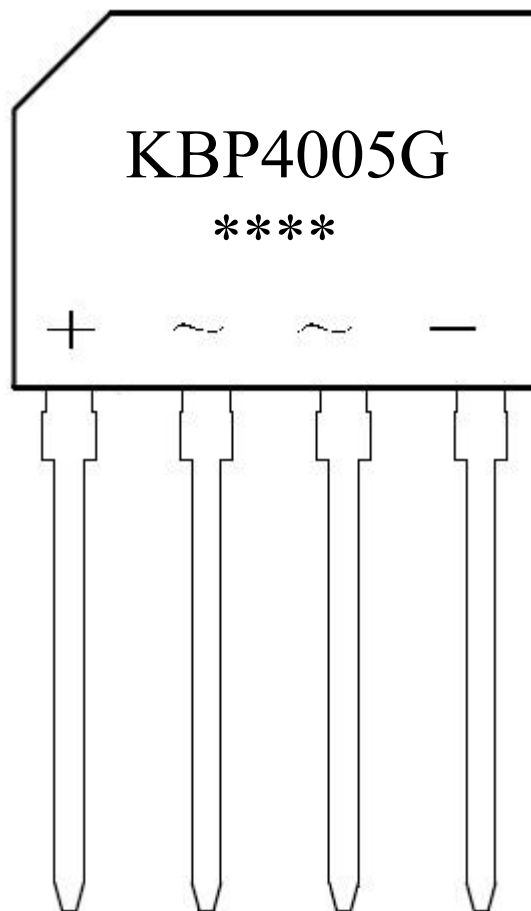
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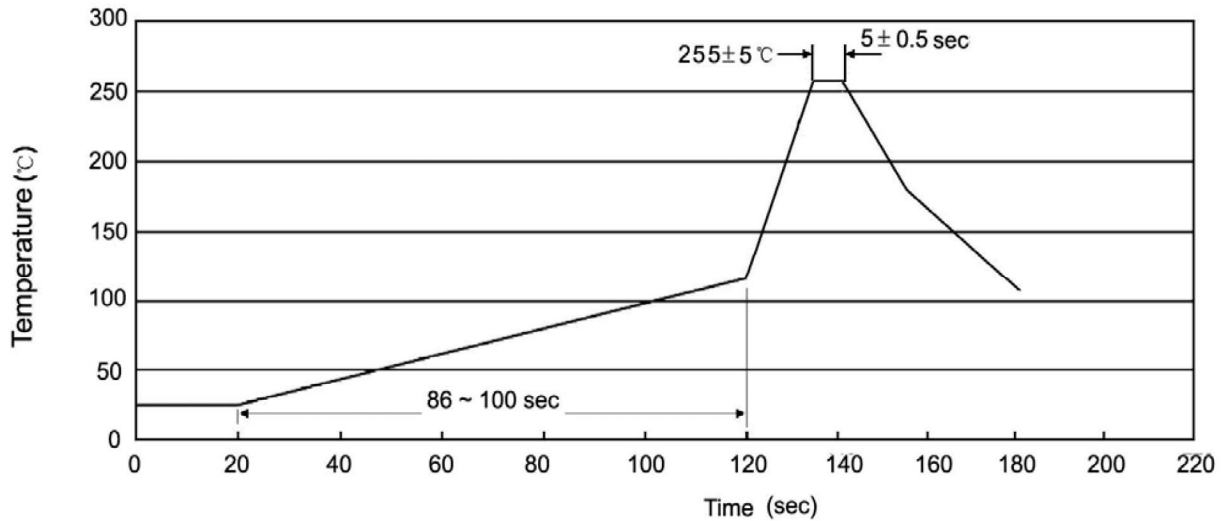
蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

印章说明 / Marking Instructions



波峰焊温度曲线图(无铅) / Temperature Profile for Dip Soldering(Pb-Free)



说明：

- 1、预热温度 25 ~ 150°C，时间 60 ~ 90sec;
- 2、峰值温度 255±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

- 1.Preheating:25~150°C, Time:60~90sec.
- 2.Peak Temp.:255±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：270±5°C

时间：10±1 sec.

Temp.:270±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

散件包装 / BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
KBP	-	-	500	10	5000	-	295*106*29	312*240*183

套管包装 / TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
KBP	35	80	2800	2	5600	-	545*200*122	560*215*269

使用说明 / Notices