

## 10A ,600V-1200V 单相玻璃钝化整流桥

### 10A ,600V-1200V Single Phase Glass Passivated Bridge Rectifier

#### ■特征 Features

玻璃钝化芯片  
Glass passivated chip  
低反向漏电流  
Low reverse leakage current  
高耐浪涌电流能力  
High surge current capability

| 关键参数<br>KEY PARAMETERS |             |            |
|------------------------|-------------|------------|
| 参数<br>PARAMETER        | 数值<br>VALUE | 单位<br>UNIT |
| $I_{F(AV)}$            | 10          | A          |
| $V_{RRM}$              | 600-1200    | V          |
| $I_{FSM}$              | 150         | A          |
| Package                | KBPC        |            |

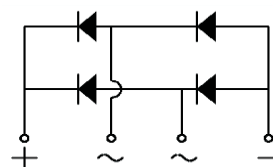
#### ■应用范围 Applications

电焊机  
Electric welder  
工业电源  
Industrial power supply  
逆变器  
Inverter  
不间断电源  
Uninterruptible power supply



#### ■机械参数 Mechanical Data

本体：KBPC  
Case: KBPC  
极性：极性符号铸在管体上  
Polarity: Polarity symbols being marked on body  
安装扭矩：12.0 kgf.cm  
Mounting torque: 12.0 kgf.cm max  
重量：约 17 克  
Weight: About 17 grams



#### ■最大额定值 Maximum Ratings @ Ta = 25°C unless otherwise noted

| 参数<br>PARAMETER                                                                                                                                                       | 符号<br>SYMBOL | KBPC1006        | KBPC1008 | KBPC1010 | KBPC1012 | 单位<br>UNIT           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------|----------|----------|----------|----------------------|
| 反向重复峰值电压<br>Maximum recurrent peak reverse voltage                                                                                                                    | $V_{RRM}$    | 600             | 800      | 1000     | 1200     | V                    |
| 平均整流输出电流<br>Average rectified output current                                                                                                                          | $I_{(AV)}$   | 10              |          |          |          | A                    |
| 带散热片, $T_c=85^\circ\text{C}$<br>with heatsink $T_c=85^\circ\text{C}$                                                                                                  |              |                 |          |          |          |                      |
| 最大正向浪涌电流, 8.3ms 单半正弦波叠加在额定负载上<br>Peak surge forward current, 8.3ms single half sinewave superimposed on rated load                                                    | $I_{FSM}$    | 150             |          |          |          | A                    |
| 热容值, $1\text{ms} < t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$ , 单个二极管<br>Rating for fusing $1\text{ms} < t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$ , Rating of per diode | $I^2t$       | 248             |          |          |          | $\text{A}^2\text{s}$ |
| 结温<br>Junction temperature                                                                                                                                            | $T_j$        | $-55 \sim +150$ |          |          |          | $^\circ\text{C}$     |
| 存储温度<br>Storage temperature                                                                                                                                           | $T_{STG}$    | $-55 \sim +150$ |          |          |          | $^\circ\text{C}$     |
| 绝缘耐压, 端子与外壳之间外加交流电 1 分钟<br>Dielectric strength terminals to case AC 1 minute                                                                                          | $V_{dis}$    | 2.5             |          |          |          | KV                   |

■电性特性 Electrical Characteristics @ Ta = 25 °C unless otherwise noted

| 参数<br>PARAMETER                | 条件<br>CONDITIONS                                                             | 符号<br>SYMBOL | 额定值<br>RATED VALUE | 单位<br>UNIT |
|--------------------------------|------------------------------------------------------------------------------|--------------|--------------------|------------|
| 正向峰值电压<br>Peak Forward Voltage | $I_F = 5A$                                                                   | $V_F$        | 1.1                | V          |
| 反向峰值电流<br>Peak Reverse Current | VR=VRRM , 脉冲测试, 单个二极管的额定值<br>VR=VRRM , Pulse measurement Rating of per diode | $I_R$        | 5                  | $\mu A$    |
|                                | $T_J = 25^{\circ}C$                                                          |              | 500                |            |
|                                | $T_J = 125^{\circ}C$                                                         |              |                    |            |

■热特性 Thermal Characteristics @ Ta =25°C unless otherwise noted

| 参数<br>PARAMETER                                                          | 符号<br>SYMBOL    | 额定值<br>RATED VALUE | 单位<br>UNIT    |
|--------------------------------------------------------------------------|-----------------|--------------------|---------------|
| 结到环境的热阻, 无散热片<br>Junction to ambient thermal resistance without heatsink | $R_{\theta JA}$ | 26                 | $^{\circ}C/W$ |
| 结到管壳的热阻, 有散热片<br>Junction to case thermal resistance with heatsink       | $R_{\theta JC}$ | 1.8                | $^{\circ}C/W$ |

■特性曲线 Characteristic Curve

FIG1.Derating Curve For Output Rectified Current

图1. 电流降额曲线

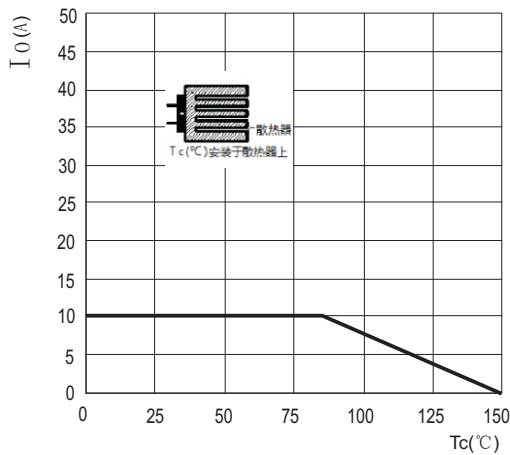


FIG2 .Maximum NonRepetitive Peak Forward Surge CurrentPer Bridge Element

图2. 最大正向不重复峰值浪涌电流

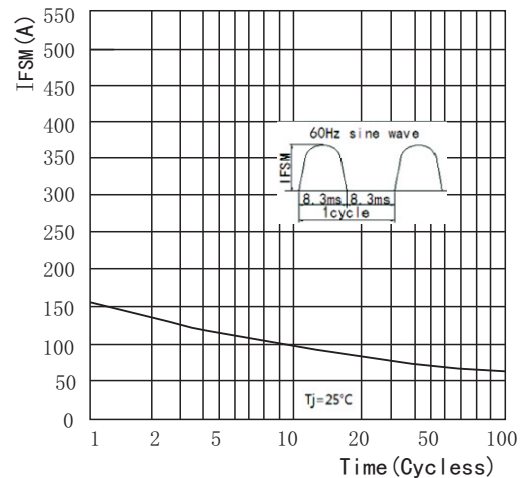


FIG3.Typical Reverse Characteristics Per Bridge Element

图3. 典型反向特性

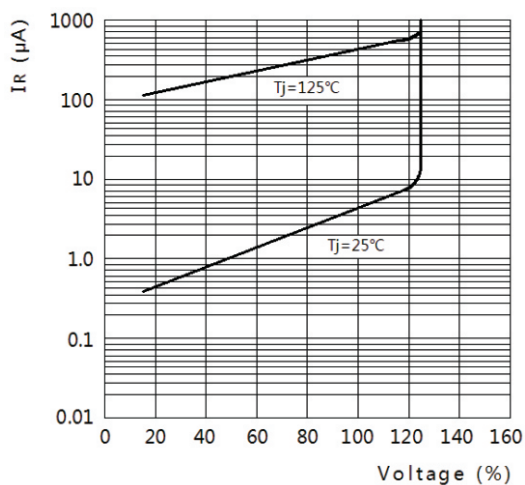
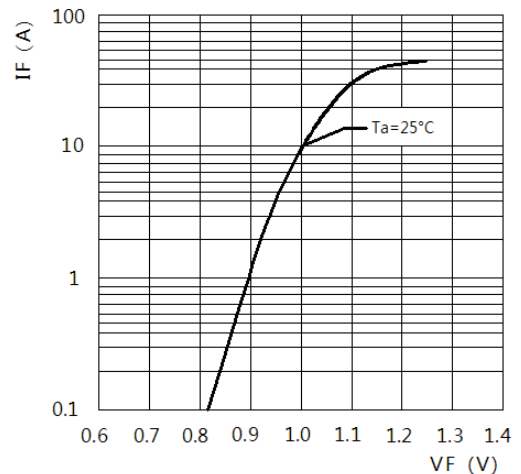
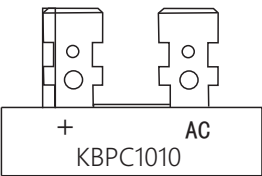


FIG4.Typical Forward Characteristics Per Bridge Element

图4. 典型正向特性

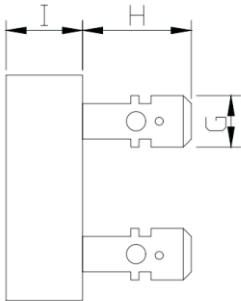
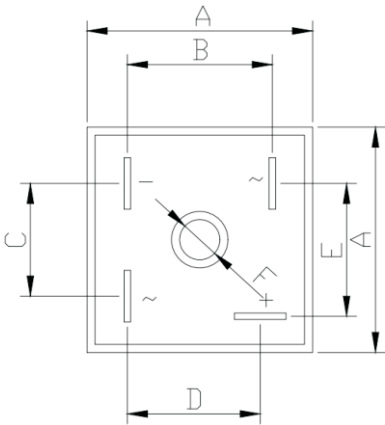


■标记图 Marking Diagram



KBPC1010 : 标识代码  
Marking code

■尺寸图 Dimension Drawing



| Dim. | Unit(mm) |       | Unit(inch) |       |
|------|----------|-------|------------|-------|
|      | Min.     | Max.  | Min.       | Max.  |
| A    | 27.50    | 28.50 | 0.547      | 0.587 |
| B    | 17.70    | 18.70 | 0.618      | 0.657 |
| C    | 14.00    | 15.00 | 0.177      | 0.217 |
| D    | 16.50    | 17.50 | 0.689      | 0.728 |
| E    | 16.50    | 17.50 | 0.689      | 0.728 |
| F    | 5.00     | 5.50  | 0.240      | 0.256 |
| G    | 6.10     | 6.50  | 0.240      | 0.256 |
| H    | 11.00    | 11.50 | 0.374      | 0.413 |
| I    | 11.00    | 11.50 | 0.374      | 0.413 |