# ABS1~ABS10

Rev.C Feb.-2015

蓝箭电子
BLUE ROCKET ELECTRONICS
**DATA SHEET**

## 描述 / Descriptions

0.8A 表面贴装玻璃钝化整流桥，薄型 ABS/LBF 封装。
0.8A Surface Mount Glass Passivated Bridge Rectifier，ABS/LBF thin package.

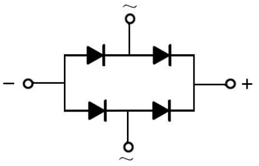
## 特征 / Features

玻璃钝化芯片，浪涌电流大，反向电压：100V~1000V 正向电流：0.8A，适用于表面贴装。无卤产品。
Glass Passivated Chip Junction, Reverse Voltage :100 to 1000V,Forward Current: 0.8A,High Surge Current Capability, Designed for Surface Mount Application. Halogen free product.

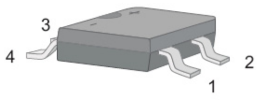
## 用途 / Applications

一般用途.
General purpose.

## 内部等效电路 / Equivalent Circuit

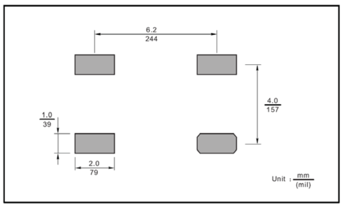


## 引脚排列 / Pinning



| PIN | DESCRIPTION |
|---|---|
| 1 | Input Pin ( ~ ) |
| 2 | Input Pin ( ~ ) |
| 3 | Output Anode ( + ) |
| 4 | Output Cathode ( - ) |

The recommended mounting pad size



## 印章代码 / Marking

见印章说明。See Marking Instructions.

## 极限参数 / Absolute Maximum Ratings(Ta=25℃)

| 参数 Parameter | 符号 Symbol | 数值 Rating | | | | | | 单位 Unit |
|---|---|---|---|---|---|---|---|---|
| | | ABS1 | ABS2 | ABS4 | ABS6 | ABS8 | ABS10 | |
| Maximum Repetitive Peak Reverse Voltage | $V_{RRM}$ | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | $V_{RMS}$ | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Average Rectified Output Current at Ta = 40 ° C | $I_o$ | 0.8 | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | $I_{FSM}$ | 30 | | | | | | A |
| Typical Junction Capacitance（Note1） | $C_i$ | 13 | | | | | | pF |
| Typical Thermal Resistance（Note2） | $R_{\theta JA}$ | 85 | | | | | | ℃/W |
| | $R_{\theta JL}$ | 30 | | | | | | ℃/W |
| Operating and Storage Temperature Range | $T_j$,$T_{stg}$ | -55~150 | | | | | | ℃ |

Note:

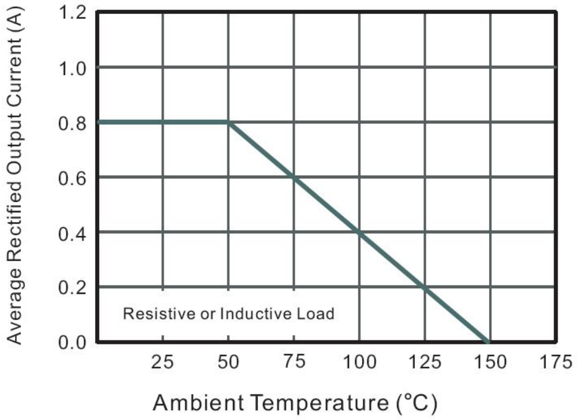
1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

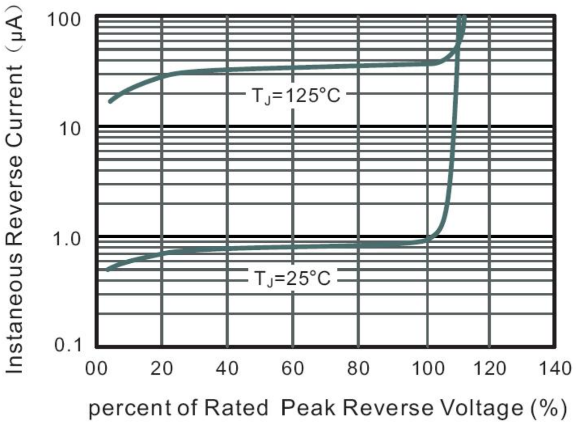
2. Mounted on glass epoxy PC board with 4×( 5×5mm$^2$） copper pad.

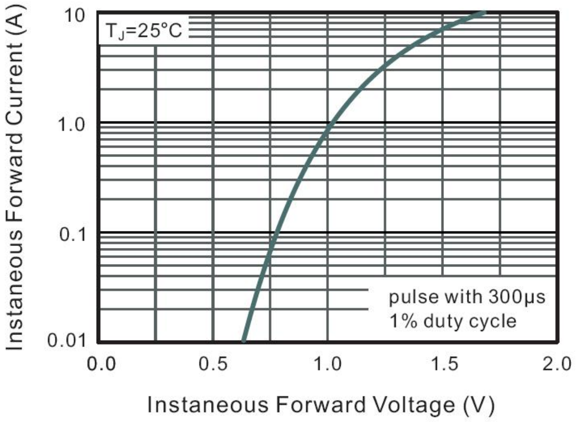
## 电性能参数 / Electrical Characteristics(Ta=25℃)

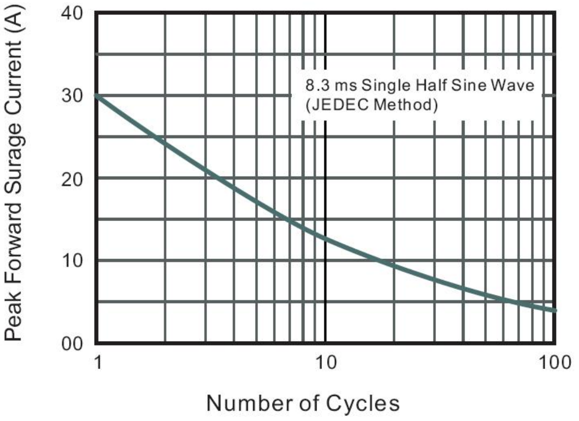
| 参数 Parameter | 符号 Symbol | 测试条件 Test Conditions | 数值 Rating | 单位 Unit |
|---|---|---|---|---|
| Forward Voltage per element | $V_F$ | $I_F$=0.4A | 1.0 | V |
| | | $I_F$=0.8A | 1.1 | |
| Maximum DC Reverse Current at Maximum DC Blocking Voltage | $I_R$ | $T_a$=25℃ | 5.0 | μA |
| | | $T_a$=100℃ | 50 | |
| | | $T_a$=125℃ | 100 | |

## 电参数曲线图 / Electrical Characteristic Curve



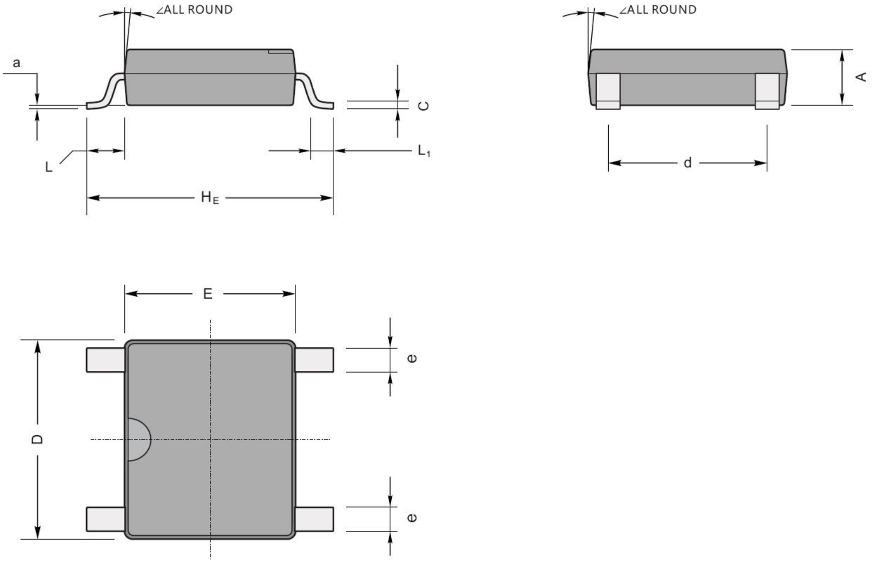






## 外形尺寸图 / Package Dimensions

ABS/LBF



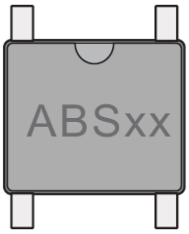
ABS/LBF mechanical data

| UNIT | | A | C | D | E | $H_E$ | d | e | L | $L_1$ | a | ∠ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | max | 1.5 | 0.22 | 5.2 | 4.5 | 6.4 | 4.2 | 0.7 | 0.95 | 0.6 | 0.2 | 7° |
| | min | 1.3 | 0.15 | 4.9 | 4.2 | 6.0 | 3.8 | 0.5 | | | | |
| mil | max | 59 | 8.7 | 205 | 177 | 252 | 165 | 28 | 37 | 24 | 4 | |
| | min | 51 | 5.9 | 193 | 166 | 236 | 150 | 20 | | | | |

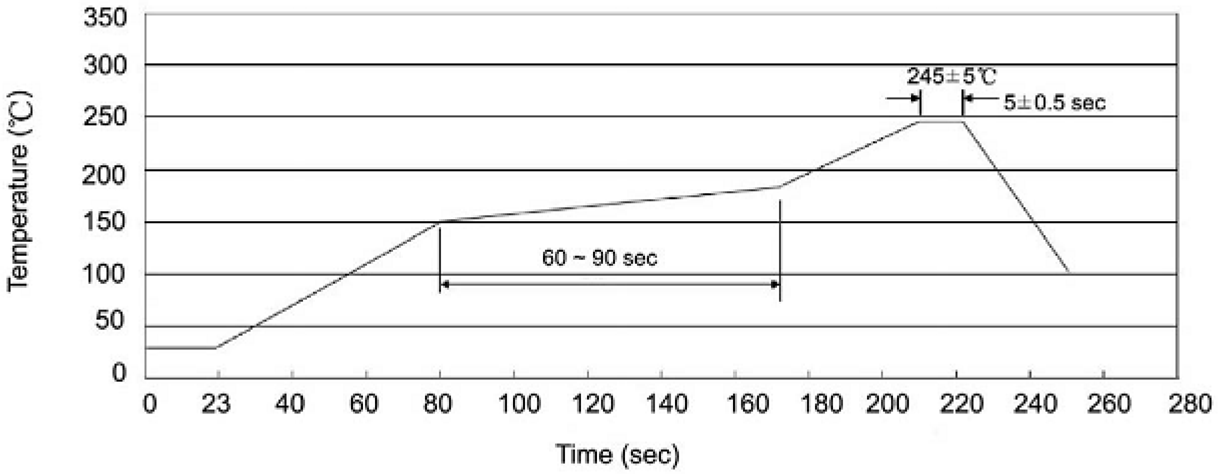
## 印章说明 / Marking Instructions

### Marking

| Type number | Marking code |
|---|---|
| ABS1 | ABS1 |
| ABS2 | ABS2 |
| ABS4 | ABS4 |
| ABS6 | ABS6 |
| ABS8 | ABS8 |
| ABS10 | ABS10 |



## 回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



| 说明： | Note: |
|---|---|
| 1、预热温度 25～150℃，时间 60～90sec; | 1.Preheating:25~150℃, Time:60~90sec. |
| 2、峰值温度 245±5℃，时间持续为 5±0.5sec; | 2.Peak Temp.:245±5℃, Duration:5±0.5sec. |
| 3、焊接制程冷却速度为 2～10℃/sec. | 3. Cooling Speed: 2~10℃/sec. |

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

温度：260±5℃　　时间：10±1 sec.　　Temp.:260±5℃　　Time:10±1 sec

## 包装规格 / Packaging SPEC.

卷盘包装 / REEL

| Package Type<br>封装形式 | Units 包装数量 | | | | | Dimension 包装尺寸 (unit: mm$^3$) | | |
|---|---|---|---|---|---|---|---|---|
| | Units/Reel<br>只/卷盘 | Reels/Inner Box<br>卷盘/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Reel | Inner Box 盒 | Outer Box 箱 |
| ABS/LBF | 5000 | 2 | 10000 | 5 | 50000 | 13″ ×15 | 336X336X40 | 345X345X235 |

## 使用说明 / Notices