



STR1045

主要参数 MAIN CHARACTERISTICS

| | |
|--------------|-------------------|
| $I_{F(AV)}$ | 10A |
| V_{RRM} | 45 V |
| T_{Jmax} | 150 °C |
| IFSM | 150 A |
| $V_{F(max)}$ | 0.44V (@Tj=125°C) |

用途

- 低压、高频整流
- 低压续流电路和保护电路

APPLICATIONS

- Low voltage, high frequency rectifier
- Free wheeling diodes, polarity protection applications

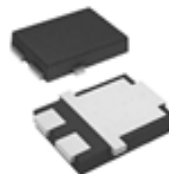
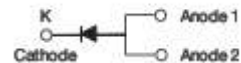
产品特性

- 低功耗，高效率
- 良好的高温特性
- 有过压保护环，高可靠性
- 环保（RoHS）产品

FEATURES

- Low power loss, high efficiency
- High Operating Junction Temperature
- Guard ring for overvoltage protection, High reliability
- RoHS product

封装 Package



SMP



SMP-1

订货信息 ORDER MESSAGE

| 订货型号 Order codes | | 印 记 Marking | 封 装 Package |
|-----------------------|----------------------------|----------------|----------------|
| 有卤-编带 Halogen-Reel | 无卤-编带 Halogen Free-Reel | | |
| STR1045-XG-A | STR1045-XG-AR | STR1045 | SMP-1 |
| STR1045-XF-A | STR1045-XF-AR | STR1045 | SMP |





绝对最大额定值 ABSOLUTE RATINGS (Tc=25℃)

| 项 目 Parameter | 符 号 Symbol | 数 值 Value | 单 位 Unit |
|---|-------------------------------------|--------------|-------------|
| 最大反向重复峰值电压 Repetitive peak reverse voltage | V _{RRM} | 45 | V |
| 最大直流阻断电压 Maximum DC blocking voltage | V _{DC} | 45 | V |
| 正向平均整流电流T _C =100℃ Average Rectified Forward Current | I _{F(AV)} | 10 | A |
| 正向峰值浪涌电流 Surge non repetitive forward current (额定负载 10ms 半正弦波) 10 ms single half-sine-wave | I _{FSM} | 150 | A |
| 最高结温 Maximum junction temperature | T _j | 150 | ℃ |
| 工作结温和储存温度范围 Storage temperature range | T _{Jmax} /T _{STG} | -55~+150 | ℃ |

电特性 ELECTRICAL CHARACTERISTICS

| 项 目 Parameter | 测试条件 Tests conditions | | 典型值 Value(typ) | 最大值 Value(max) | 单 位 Unit |
|----------------------|--------------------------|----------------------------------|----------------------------------|-------------------|-------------|
| | I _R | T _j =25℃ | V _R =V _{RRM} | 0.02 | |
| T _j =125℃ | | V _R =V _{RRM} | 2.5 | 5 | |
| V _F | T _j =25℃ | I _F =5A | 0.43 | — | V |
| | T _j =25℃ | I _F =10A | 0.46 | 0.5 | |
| | T _j =125℃ | I _F =5A | 0.38 | — | |
| | T _j =125℃ | I _F =10A | 0.44 | 0.46 | |
| C _J | 5V 1MHz | | 800 | — | pF |

热特性 THERMAL CHARACTERISTICS

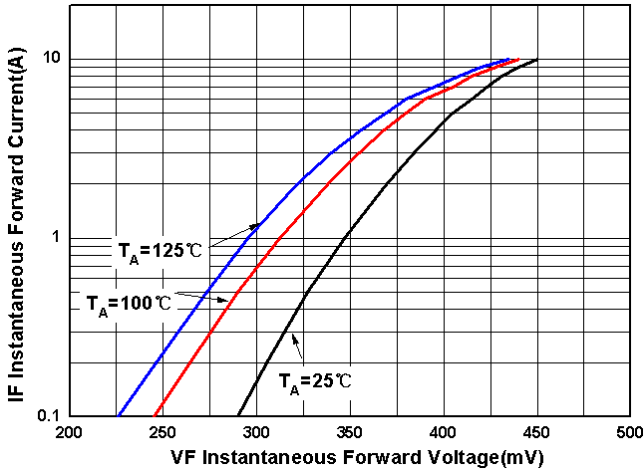
| 项 目 Parameter | 符 号 Symbol | 最小值 Value(min) | 最大值 Value(max) | 单 位 Unit |
|---|--------------------------------------|-------------------|-------------------|-------------|
| 结到管壳的热阻 Thermal resistance from junction to case | SMP SMP-1 R _{th(j-c)} | — | 25 35 | ℃/W |
| 结到环境的热阻 Thermal resistance from junction to ambient | SMP SMP-1 R _{th(j-a)} | — | 150 200 | |



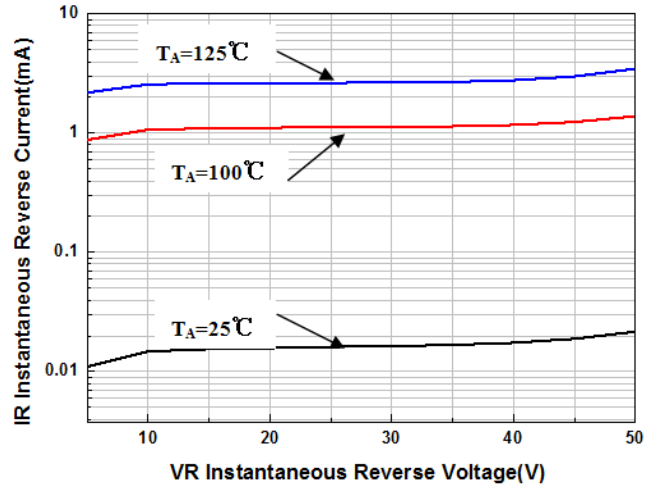


特征曲线 ELECTRICAL CHARACTERISTICS (curves)

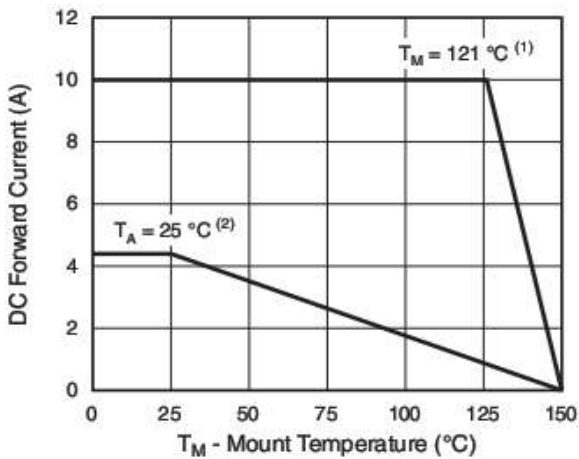
IF vs VF



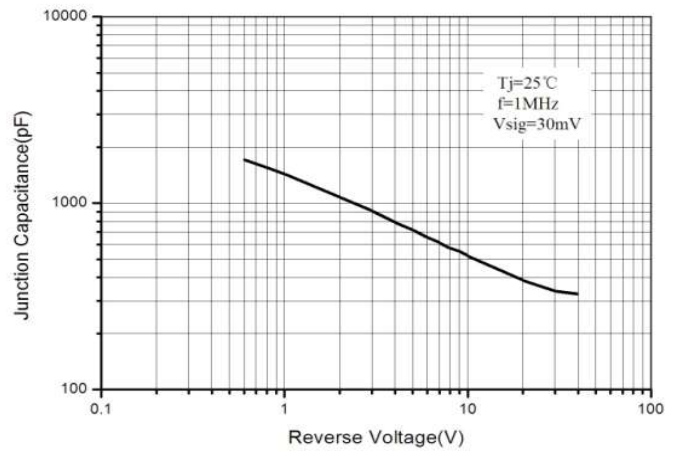
IR vs VR



IF vs TM



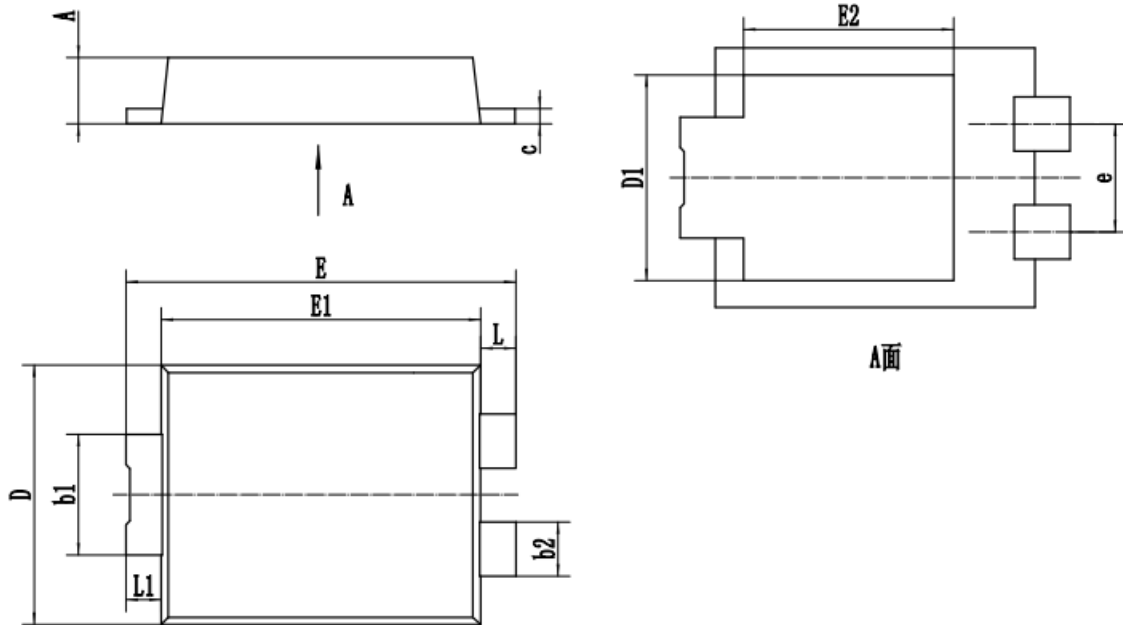
CJ vs VR





外形尺寸 PACKAGE MECHANICAL DATA
SMP-1

单位 Unit : mm



| 符号 Symbol | Min | Max |
|--------------|------|------|
| A | 0.90 | 1.30 |
| b1 | 1.60 | 2.00 |
| b2 | 0.70 | 1.10 |
| c | 0.28 | 0.47 |
| D | 3.70 | 4.30 |
| D1 | 2.80 | 3.30 |
| E | 6.30 | 6.70 |
| E1 | 5.20 | 5.60 |
| E2 | 3.05 | 4.05 |
| e | 1.60 | 2.00 |
| L | 0.30 | 0.80 |
| L1 | 0.30 | 0.80 |

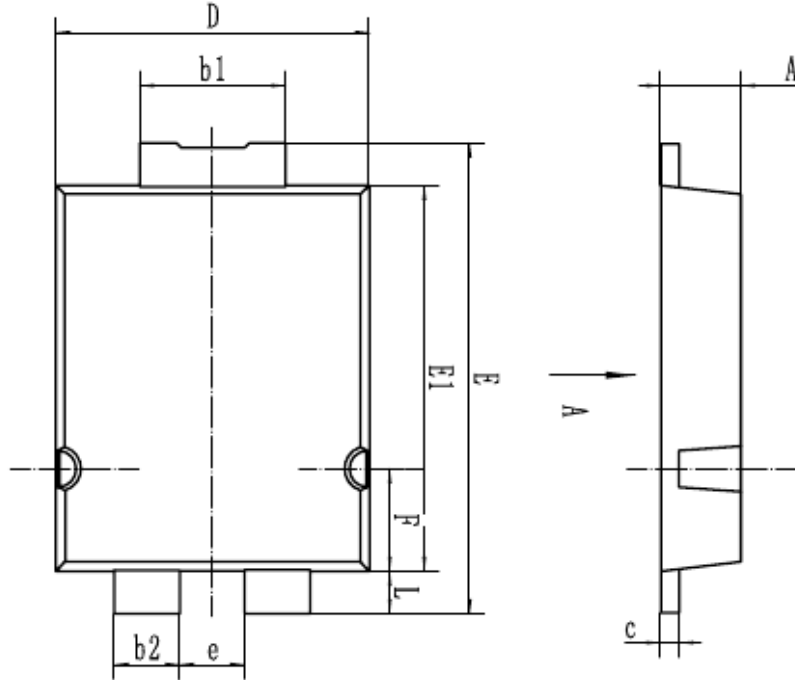




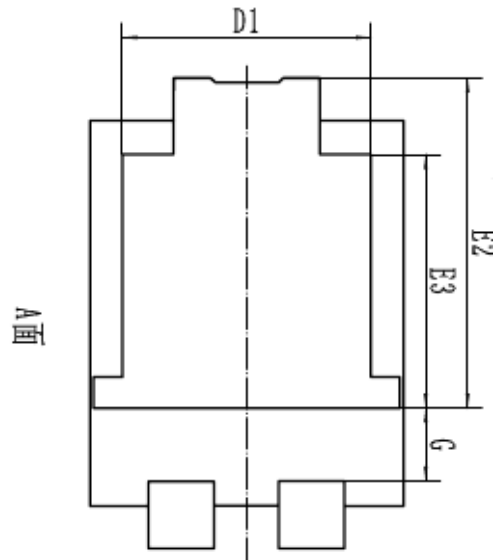
外形尺寸 PACKAGE MECHANICAL DATA

SMP

单位 Unit : mm



| 符号 Symbol | Min | Max |
|--------------|------|------|
| A | 1.00 | 1.40 |
| b1 | 1.70 | 2.30 |
| b2 | 0.60 | 1.20 |
| c | 0.10 | 0.40 |
| D | 4.00 | 4.60 |
| D1 | 3.10 | 3.70 |
| E | 6.20 | 6.80 |
| E1 | 5.00 | 5.60 |
| E2 | 4.25 | 4.85 |
| E3 | 3.20 | 3.80 |
| e | 0.70 | 1.10 |
| F | 1.35 | 1.95 |
| G | 0.90 | |
| L | 0.40 | 0.80 |





注意事项

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4. 本说明书如有版本变更不另外告知

NOTE

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