

BR2SB1198MC

Rev.A Mar.-2023

描述 / Descriptions

SOT23-3 塑封封装 PNP 半导体三极管。Silicon PNP transistor in a SOT23-3 Plastic Package.

特征 / Features

击穿电压高, 饱和压降低, 与 BR2SD1782MC 互补, 无卤产品。

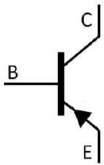
High breakdown, low $V_{CE(sat)}$, complements the BR2SD1782MC, HF Product.

用途 / Applications

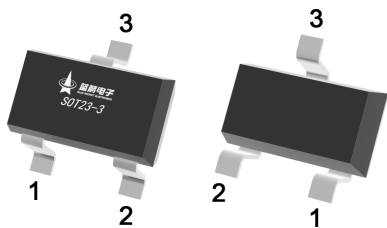
用于一般中功率放大。

Medium power amplifier applications.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN 1 : Base

PIN 2 : Emitter

PIN 3 : Collector

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

| | | |
|---------------------------------|---------|---------|
| h_{FE} Classifications Symbol | Q | R |
| h_{FE} Range | 120~270 | 180~390 |
| Marking | HAKQ | HAKR |

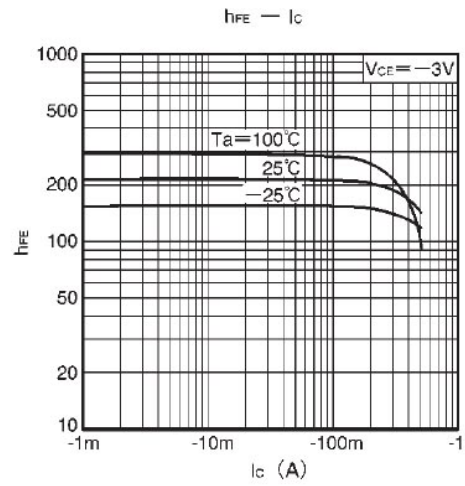
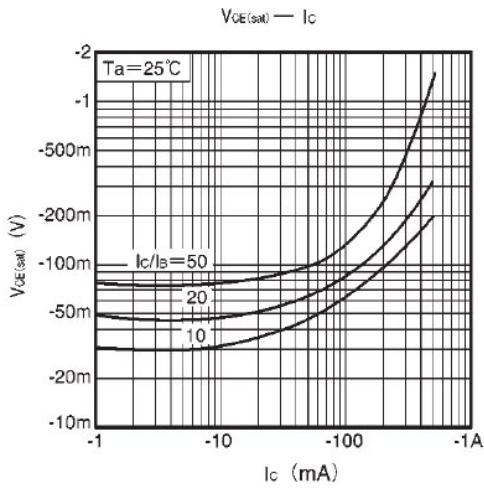
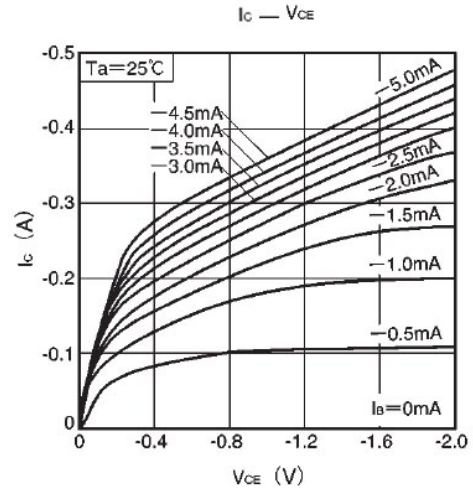
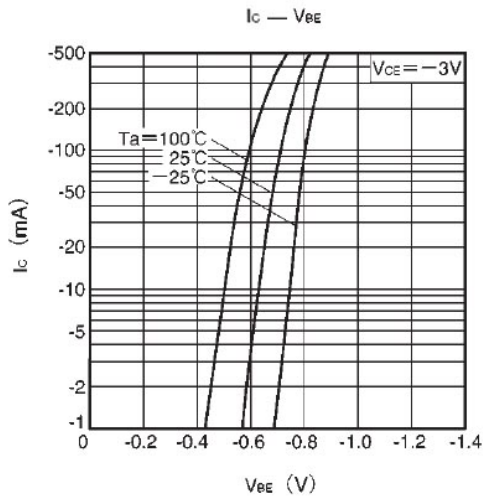
极限参数 / Absolute Maximum Ratings(Ta=25°C)

| 参数 Parameter | 符号 Symbol | 数值 Rating | 单位 Unit |
|--------------------------------|------------------|--------------|------------|
| Collector to Base Voltage | V _{CBO} | -80 | V |
| Collector to Emitter Voltage | V _{CEO} | -80 | V |
| Emitter to Base Voltage | V _{EBO} | -5 | V |
| Collector Current - Continuous | I _C | -500 | mA |
| Collector Power Dissipation | P _C | 200 | mW |
| Junction Temperature | T _J | 150 | °C |
| Storage Temperature Range | T _{stg} | -55 ~ 150 | °C |

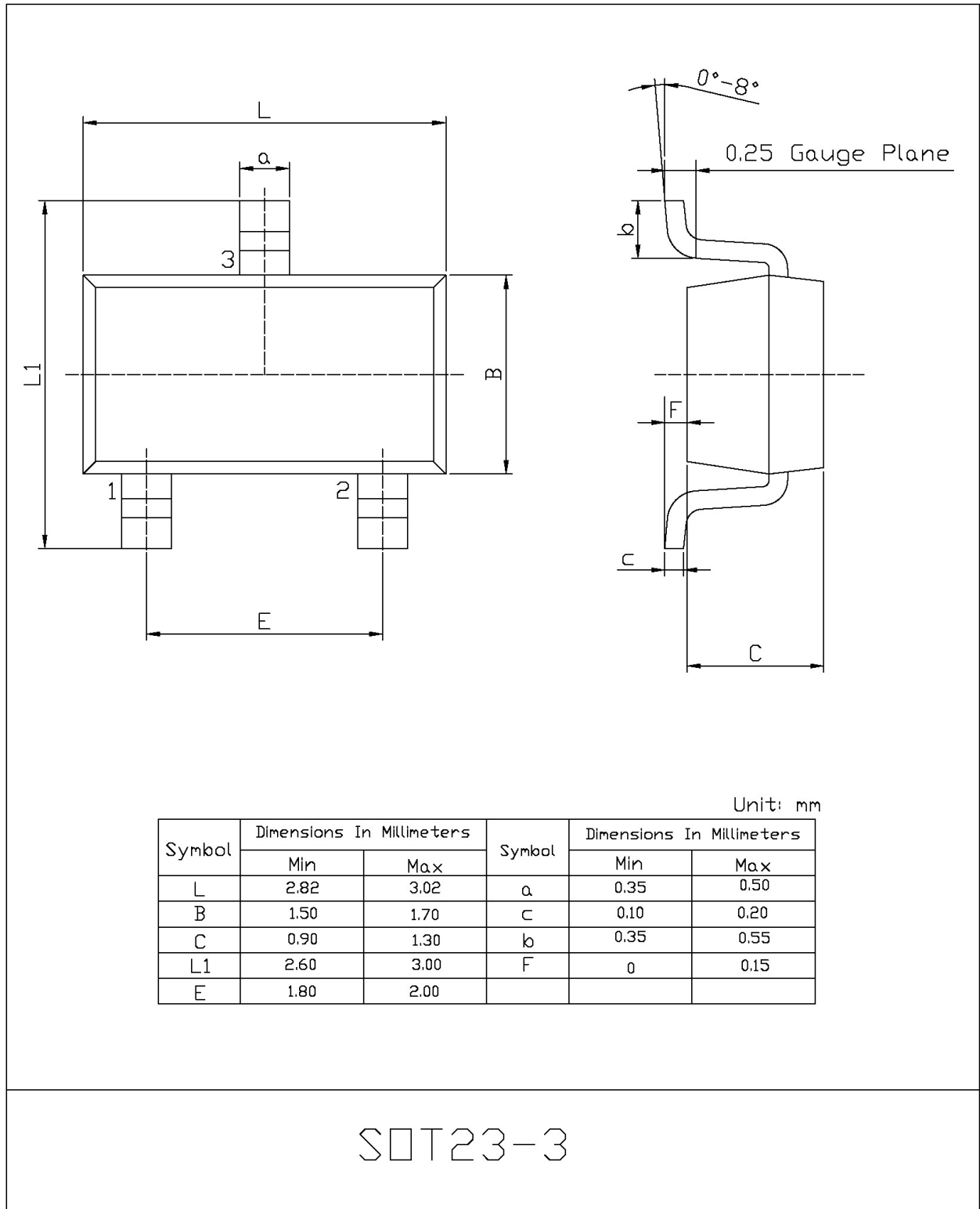
电性能参数 / Electrical Characteristics(Ta=25°C)

| 参数 Parameter | 符号 Symbol | 测试条件 Test Conditions | 最小值 Min | 典型值 Typ | 最大值 Max | 单位 Unit |
|---|----------------------|--|------------|------------|------------|------------|
| Collector to Base Breakdown Voltage | V _{CBO} | I _C =-50μA | -80 | | | V |
| Collector to Emitter Breakdown Voltage | V _{CEO} | I _C =-2mA | -80 | | | V |
| Emitter to Base Breakdown Voltage | V _{EBO} | I _E =-50μA | -5 | | | V |
| Collector Base Cut-Off Current | I _{CB0} | V _{CB} =-50 V I _E =0 | | | -0.5 | μA |
| Collector Emitter Cut-Off Current | I _{CE0} | V _{CE} =-65 V I _B =0 | | | -5 | μA |
| Emitter Base Cut-Off Current | I _{EBO} | V _{EB} =-4.0V I _C =0 | | | -0.5 | μA |
| DC Current Gain | h _{FE} | V _{CE} =-3.0V I _C =-100mA | 120 | | 390 | |
| Collector to Emitter Saturation Voltage | V _{CE(sat)} | I _C =-500mA I _B =-50mA | | | -0.5 | V |
| Transition Frequency | f _T | I _C =-50mA f=100MHz V _{CE} =-10V | | 180 | | MHz |
| Collector output capacitance | C _{ob} | V _{CB} =-10V I _E =0 f=1.0MHz | | 11 | | pF |

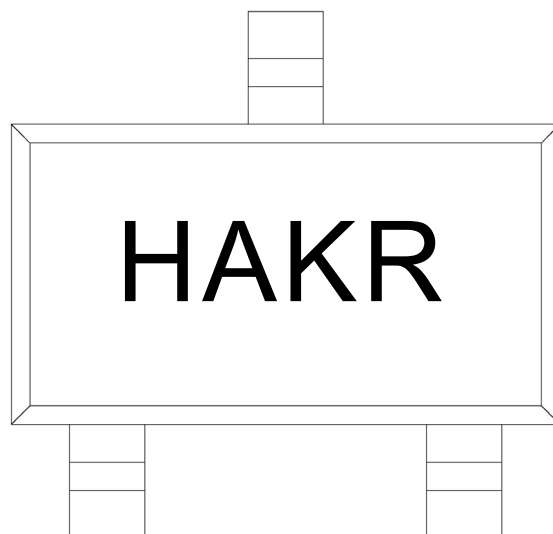
电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions



印章说明 / Marking Instructions



说明：

H： 为公司代码

AK： 为型号代码

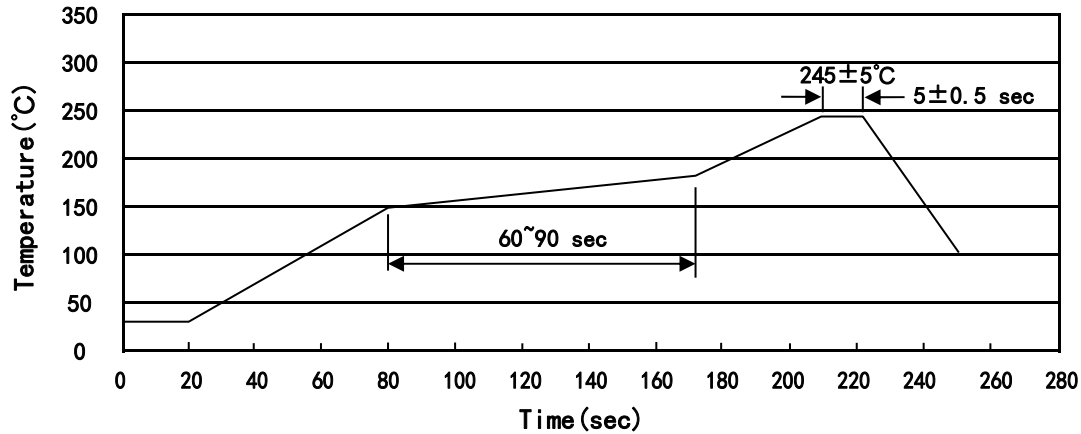
R： 为 h_{FE} 分档代码

Note:

H: Company Code

AK: Product Type Code

R: h_{FE} Classifications Symbol Code

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


说明：

- 1、预热温度 150~180°C，时间 60~90sec;
- 2、峰值温度 245±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:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±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：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

| Package Type 封装形式 | Units 包装数量 | | | | | Dimension 包装尺寸 (unit: mm ³) | | |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|---|-------------|-------------|
| | Units/Reel 只/卷盘 | Reels/Inner Box 卷盘/盒 | Units/Inner Box 只/盒 | Inner Boxes/Outer Box 盒/箱 | Units/Outer Box 只/箱 | Reel | Inner Box 盒 | Outer Box 箱 |
| SOT-23-3 | 3,000 | 10 | 30,000 | 4 | 120,000 | 7" ×8 | 210×205×205 | 445×230×435 |

使用说明 / Notices