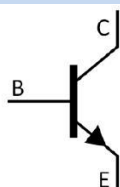




SOT-23 Plastic Package      Silicon NPN transistor in a SOT-23 Plastic Package.

2SA1981S  
High  $h_{FE}$  complementary pair with 2SA1981S.

Audio power amplifier application



PIN1 Base

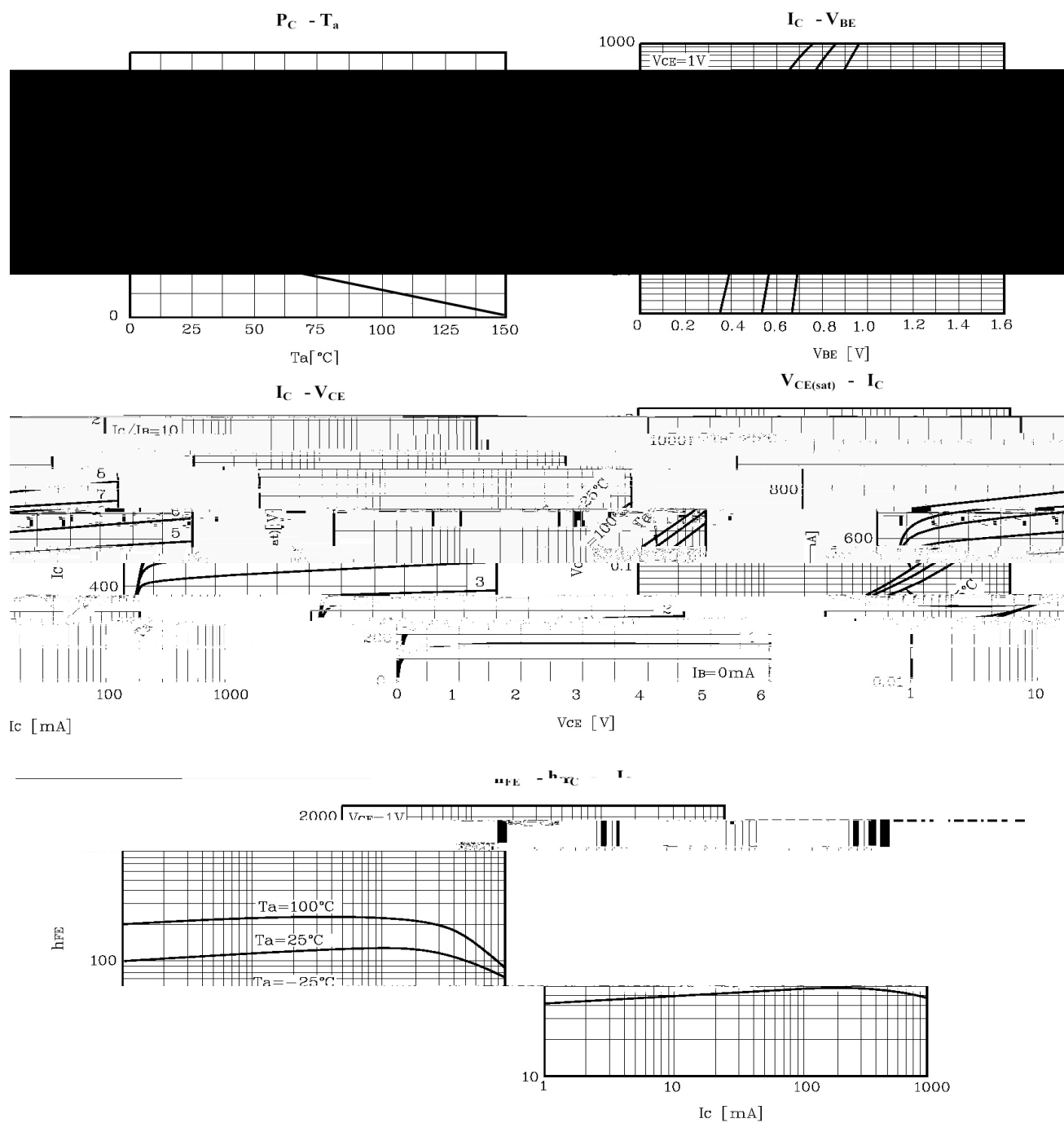
| $h_{FE}$ Classifications<br>Symbol | O       | Y       |
|------------------------------------|---------|---------|
| $h_{FE}$ Range                     | 100 200 | 160 320 |
| Marking                            | HFAO    | HFAY    |



| Parameter                    | Symbol    | Rating  | Unit |
|------------------------------|-----------|---------|------|
| Collector to Base Voltage    | $V_{CBO}$ | 35      | V    |
| Collector to Emitter Voltage | $V_{CEO}$ | 30      | V    |
| Emitter to Base Voltage      | $V_{EBO}$ | 5.0     | V    |
| Collector Current            | $I_C$     | 800     | mA   |
| Collector Power Dissipation  | $P_C$     | 200     | mW   |
| Junction Temperature         | $T_j$     | 150     | °C   |
| Storage Temperature          | $T_{stg}$ | -55~150 | °C   |

| Parameter                              | Symbol        | Test Conditions                 | Min | Typ | Max | Unit    |
|----------------------------------------|---------------|---------------------------------|-----|-----|-----|---------|
| Collector to Base Breakdown Voltage    | $V_{CBO}$     | $I_C=100\mu A$ $I_E=0$          | 35  |     |     | V       |
| Collector to Emitter Breakdown Voltage | $V_{CEO}$     | $I_C=1.0mA$ $I_B=0$             | 30  |     |     | V       |
| Emitter to Base Breakdown Voltage      | $V_{EBO}$     | $I_E=10\mu A$ $I_C=0$           | 5.0 |     |     | V       |
| Collector Cut-Off Current              | $I_{CBO}$     | $V_{CB}=35V$ $I_E=0$            |     |     | 0.1 | $\mu A$ |
| Emitter Base Cut-Off Current           | $I_{EBO}$     | $V_{EB}=5.0V$ $I_C=0$           |     |     | 0.1 | $\mu A$ |
| DC Current Gain                        | $h_{FE}$      | $V_{CE}=1.0V$ $I_C=100mA$       | 100 |     | 320 |         |
| Collector-emitter saturation voltage   | $V_{CE(sat)}$ | $I_C=500mA$ $I_B=50mA$          |     |     | 0.5 | V       |
| Transition Frequency                   | $f_T$         | $V_{CE}=5.0V$ $I_C=10mA$        |     | 120 |     | MHz     |
| Collector output capacitance           | $C_{ob}$      | $V_{CB}=10V$ $f=1.0MHz$ $I_E=0$ |     | 13  |     | pF      |

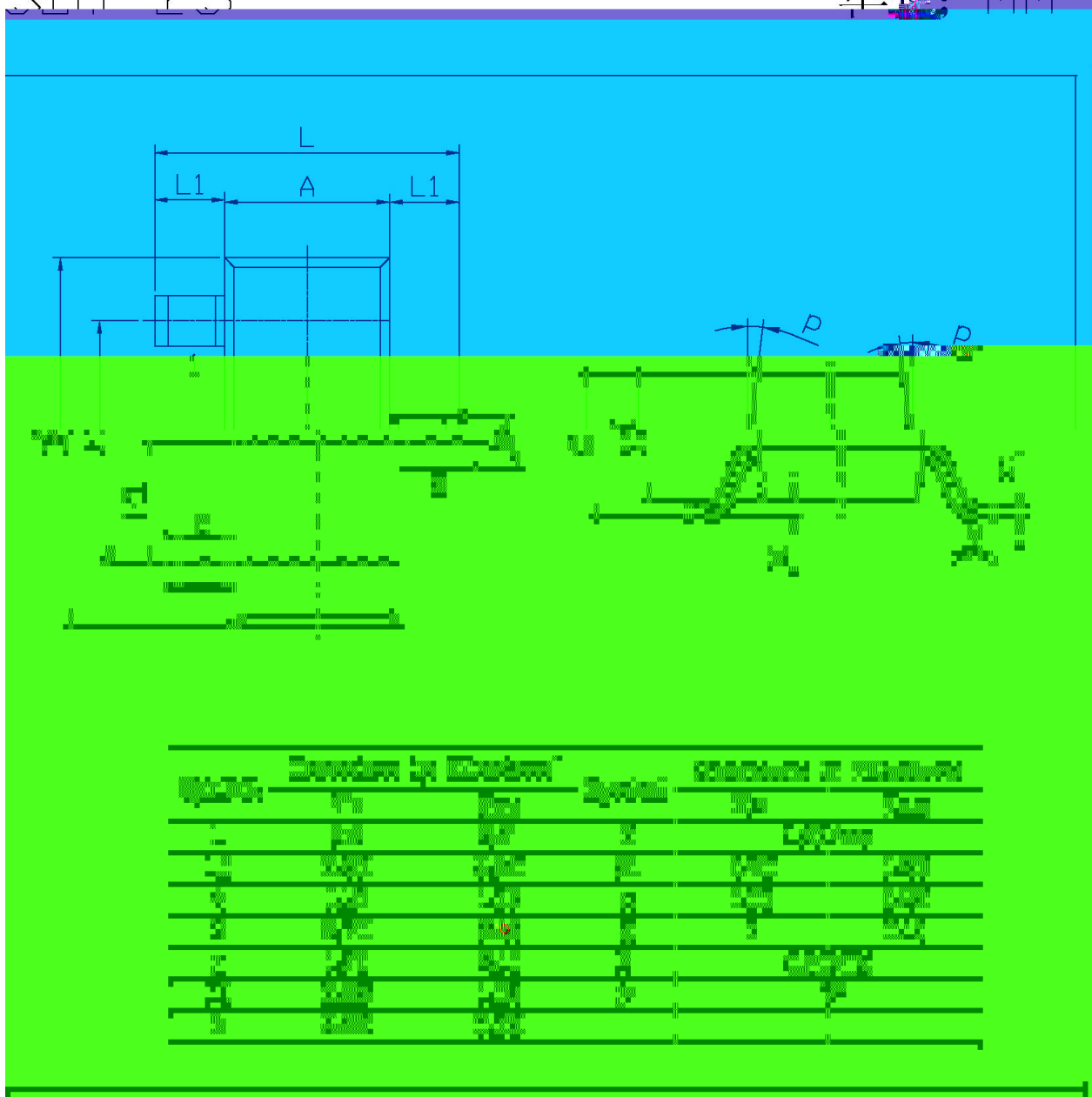


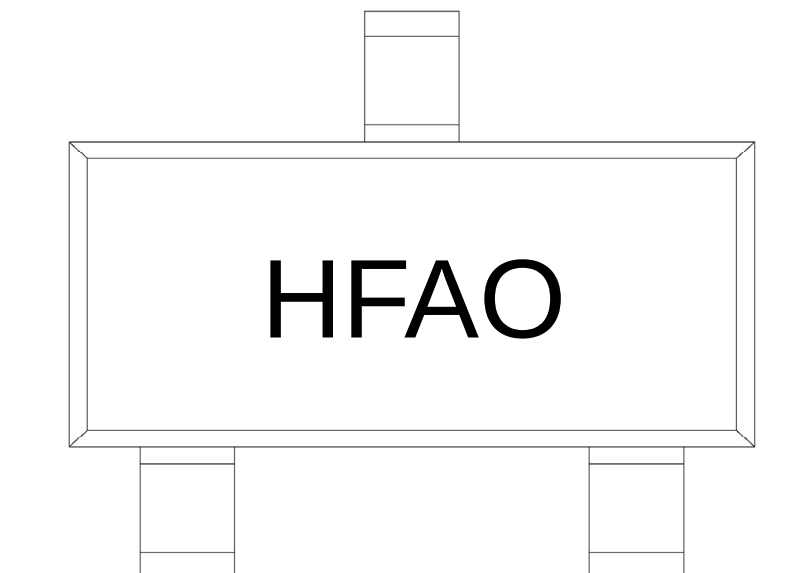




SOT-23

单位: mm





H

FA

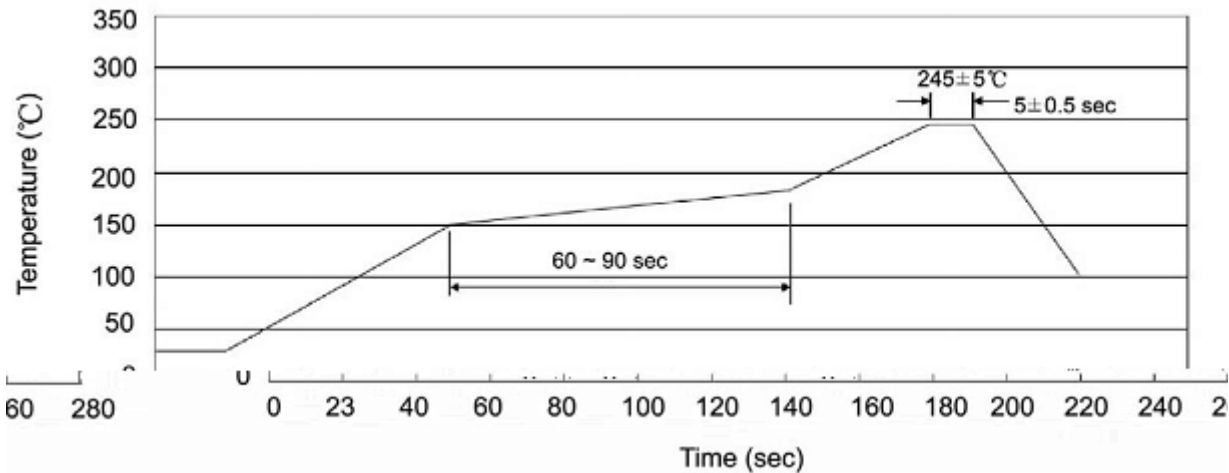
O  $h_{FE}$

Note:

H Company Code

FA Product Type Code

O  $h_{FE}$  Classifications Symbol Code



Note:

- 1251506090sec;1.Preheating:25~150,Time:60~90sec.
- 2245±55±0.5245±5,Duration:5±0.5sec.
- 3/REEL

260±5°C,Time:10±1 secTemp.:260±5°CTime:10±1 sec

/ REEL

| Package Type<br>封装形式 | Units 包装数量 |    |    |    | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |   |  |
|----------------------|------------|----|----|----|-----------------------------------------|---|--|
|                      | 盘盒         | 只盒 | 盒箱 | 只箱 | 盒                                       | 箱 |  |
|                      |            |    |    |    | "                                       |   |  |