



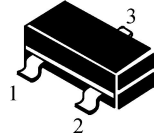
# 安徽富信半導體科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD

SS8050

SOT-23

- 1. BASE
- 2. EMITTER
- 3. COLLECTOR



## ■ FEATURES 特點

Low Frequency Power Amplifier 低頻功率放大  
 Suitable for Driver Stage of Small Motor 小馬達驅動  
 Complementary to SS8550 与 SS8550 互补

## ■ 最大額定值( $T_a=25^{\circ}\text{C}$ )

| CHARACTERISTIC<br>特性參數                 | Symbol<br>符號 | Rating<br>額定值 | Unit<br>單位         |
|--|--------------|---------------|--------------------|
| Collector-Base Voltage<br>集電極-基極電壓     | $V_{CBO}$    | 30            | Vdc                |
| Collect-Emmitter Voltage<br>集電極-發射極電壓  | $V_{CEO}$    | 20            | Vdc                |
| Emitter-Base Voltage<br>發射極-基極電壓       | $V_{EBO}$    | 5.0           | Vdc                |
| Collector Current<br>集電極電流             | $I_c$        | 1500          | mAdc               |
| Collector Power Dissipation<br>集電極耗散功率 | $P_C$        | 300           | mW                 |
| Junction Temperature<br>結溫             | $T_j$        | 150           | $^{\circ}\text{C}$ |
| Storage Temperature Range<br>儲存溫度      | $T_{stg}$    | -55~150       | $^{\circ}\text{C}$ |

## ■ DEVICE MARKING 打標

SS8050=Y1

## ■ $H_{FE}$ RANGE 放大倍數分檔

$H_{FE}(1)$  (85~150), (120~220)  
 (200~300), (280~400)

SS8050

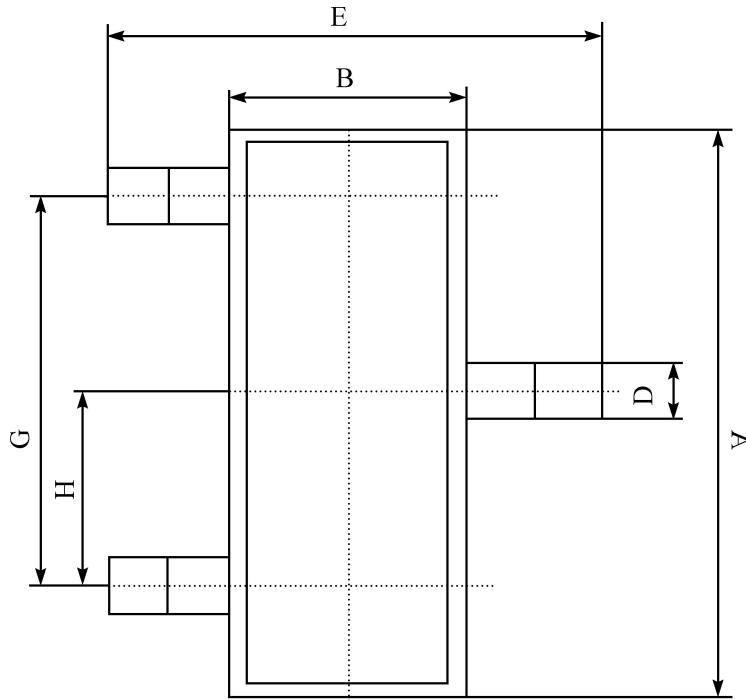
## ■ ELECTRICAL CHARACTERISTICS 電特性

( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如無特殊說明, 溫度為  $25^{\circ}\text{C}$ )

| Characteristic<br>特性參數                              | Symbol<br>符號  | Test Condition<br>測試條件                    | Min.<br>最小值 | Typ.<br>典型值 | Max.<br>最大值 | Unit<br>單位    |
|---|---------------|---|-------------|-------------|-------------|---------------|
| Collector Cutoff Current<br>集電極截止電流                 | $I_{CBO}$     | $V_{CB}=30\text{V}, I_E=0$                | —           | —           | 0.1         | $\mu\text{A}$ |
| Emitter Cutoff Current<br>發射極截止電流                   | $I_{EBO}$     | $V_{EB}=5\text{V}, I_C=0$                 | —           | —           | 0.1         | $\mu\text{A}$ |
| Collector-Base Breakdown Voltage<br>集電極-基極擊穿電壓      | $V_{(BR)CBO}$ | $I_C=100\mu\text{A}$                      | 30          | —           | —           | V             |
| Collector-Emitter Breakdown Voltage<br>集電極-發射極擊穿電壓  | $V_{(BR)CEO}$ | $I_C=10\text{mA}$                         | 20          | —           | —           | V             |
| Emitter-Base Breakdown Voltage<br>發射極-基極擊穿電壓        | $V_{(BR)EBO}$ | $I_E=100\mu\text{A}$                      | 5           | —           | —           | V             |
| DC Current Gain<br>直流電流增益                           | $H_{FE(1)}$   | $V_{CE}=1\text{V}, I_C=100\text{mA}$      | 85          | —           | 400         | —             |
|   | $H_{FE(2)}$   | $V_{CE}=1\text{V}, I_C=1500\text{mA}$     | 40          | —           | —           |               |
| Collector-Emitter Saturation Voltage<br>集電極-發射極飽和壓降 | $V_{CE(sat)}$ | $I_C=1500\text{mA}, I_B=150\text{mA}$     | —           | —           | 0.6         | V             |
| Base-Emitter Voltage<br>基極-發射極電壓                    | $V_{BE}$      | $V_{CE}=1\text{V}, I_C=10\text{mA}$       | —           | 0.8         | 1.0         | V             |
| Transition Frequency<br>特徵頻率                        | $f_T$         | $V_{CE}=5\text{V}, I_C=10\text{mA}$       | 100         | 120         | —           | MHz           |
| Collector Output Capacitance<br>輸出電容                | $C_{ob}$      | $V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$ | —           | 13          | 30          | pF            |

SS8050

## ■ DIMENSION 外形封裝尺寸



| 序號 | 數值及公差           |
|----|-----------------|
| A  | $2.90 \pm 0.10$ |
| B  | $1.30 \pm 0.10$ |
| C  | $1.00 \pm 0.10$ |
| D  | $0.40 \pm 0.10$ |
| E  | $2.40 \pm 0.20$ |
| G  | $1.90 \pm 0.10$ |
| H  | $0.95 \pm 0.05$ |
| J  | $0.13 \pm 0.05$ |
| K  | $0.00 - 0.10$   |
| M  | $\geq 0.2$      |
| N  | $0.60 \pm 0.10$ |
| P  | $7 \pm 2^\circ$ |

