

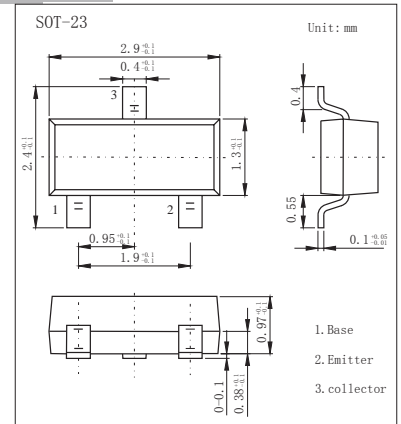
## SOT-23 Plastic-Encapsulate Transistors

### FEATURES

- Suitable for AF-Driver stages and low power output stages
- Complement to BC818
- TRANSISTOR (PNP)

### MECHANICAL DATA

- Case style: SOT-23 molded plastic
- Mounting position: any



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Symbol    | Parameter                     | Value   | Unit |
|-----------|-------------------------------|---------|------|
| $V_{CB0}$ | Collector-Base Voltage        | -30     | V    |
| $V_{CEO}$ | Collector-Emitter Voltage     | -25     | V    |
| $V_{EBO}$ | Emitter-Base Voltage          | -5      | V    |
| $I_C$     | Collector Current –Continuous | -0.8    | A    |
| $P_C$     | Collector Power Dissipation   | 300     | mW   |
| $T_j$     | Junction Temperature          | 150     | °C   |
| $T_{stg}$ | Storage Temperature           | -65-150 | °C   |

| Parameter                            | Symbol        | Test conditions                        | Min | Typ | Max  | Unit    |
|--------------------------------------|---------------|--|-----|-----|------|---------|
| Collector-base breakdown voltage     | $V_{(BR)CBO}$ | $I_C = -100\mu A, I_E = 0$             | -30 |     |      | V       |
| Collector-emitter breakdown voltage  | $V_{(BR)CEO}$ | $I_C = -10mA, I_B = 0$                 | -25 |     |      | V       |
| Emitter-base breakdown voltage       | $V_{(BR)EBO}$ | $I_E = -100\mu A, I_C = 0$             | -5  |     |      | V       |
| Collector cut-off current            | $I_{CBO}$     | $V_{CB} = -25V, I_E = 0$               |     |     | -0.1 | $\mu A$ |
| Emitter cut-off current              | $I_{EBO}$     | $V_{EB} = -4V, I_C = 0$                |     |     | -0.1 | $\mu A$ |
| DC current gain                      | $h_{FE(1)}$   | $V_{CE} = -1V, I_C = -100mA$           | 100 |     | 630  |         |
|                                      | $h_{FE(2)}$   | $V_{CE} = -1V, I_C = -300mA$           | 60  |     |      |         |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -500mA, I_B = -50mA$            |     |     | -0.7 | V       |
| Base-emitter voltage                 | $V_{BE}$      | $V_{CE} = -1V, I_C = -300mA$           |     |     | -1.2 | V       |
| Transition frequency                 | $f_T$         | $V_{CE} = -5V, I_C = -10mA, f = 50MHz$ |     | 100 |      | MHz     |
| Collector output capacitance         | $C_{ob}$      | $V_{CB} = -10V, I_E = 0, f = 1MHz$     |     | 12  |      | pF      |

### CLASSIFICATION OF $h_{FE}$

| Rank              | 16      | 25      | 40      |
|-------------------|---------|---------|---------|
| Range $h_{FE(1)}$ | 100-250 | 160-400 | 250-630 |
| Marking           | 5E      | 5F      | 5G      |