2SC5609

Silicon PNP epitaxial planer type

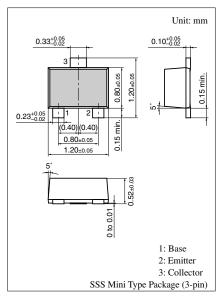
For general amplification Complementary to 2SA2021

■ Features

- High foward current transfer ratio h_{FE}
- SSS-mini type package, allowing downsizing and thinning of the equipment and automatic insertion through the tape packing

■ Absolute Maximum Ratings $T_a = 25$ °C

| Parameter | Symbol | Rating | Unit |
|------------------------------|------------------|-------------|------|
| Collector to base voltage | V _{CBO} | 60 | V |
| Collector to emitter voltage | V _{CEO} | 50 | V |
| Emitter to base voltage | V _{EBO} | 7 | V |
| Peak collector current | I_{CP} | 200 | mA |
| Collector current | I_{C} | 100 | mA |
| Collector power dissipation | P _C | 100 | mW |
| Junction temperature | T _j | 125 | °C |
| Storage temperature | T_{stg} | -55 to +125 | °C |



Marking Symbol: 3F

■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

| Parameter | Symbol | Conditions | Min | Тур | Max | Unit |
|---|----------------------|---|-----|-----|-----|------|
| Collector cutoff current | I_{CBO} | $V_{CB} = 20 \text{ V}, I_E = 0$ | | | 0.1 | μΑ |
| | I_{CEO} | $V_{CE} = 10 \text{ V}, I_B = 0$ | | | 100 | μΑ |
| Collector to base voltage | V_{CBO} | $I_{\rm C} = 10 \; \mu {\rm A}, \; I_{\rm E} = 0$ | 60 | | | V |
| Collector to emitter voltage | V_{CEO} | $I_C = 2 \text{ mA}, I_B = 0$ | 50 | | | V |
| Emitter to base voltage | V_{EBO} | $I_E = 10 \ \mu A, \ I_C = 0$ | 7 | | | V |
| Forward current transfer ratio | h _{FE1} | $V_{CE} = 10 \text{ V}, I_{C} = 2 \text{ mA}$ | 180 | | 390 | |
| | h _{FE2} | $V_{CE} = 2 \text{ V}, I_{C} = 100 \text{ mA}$ | 90 | | | |
| Collector to emitter saturation voltage | V _{CE(sat)} | $I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$ | | 0.1 | 0.3 | V |
| Collector output capacitance | C _{ob} | $V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$ | | 3.5 | | pF |
| Transition frequency | f_T | $V_{CB} = 10 \text{ V}, I_E = -2 \text{ mA}, f = 200 \text{ MHz}$ | | 80 | | MHz |

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