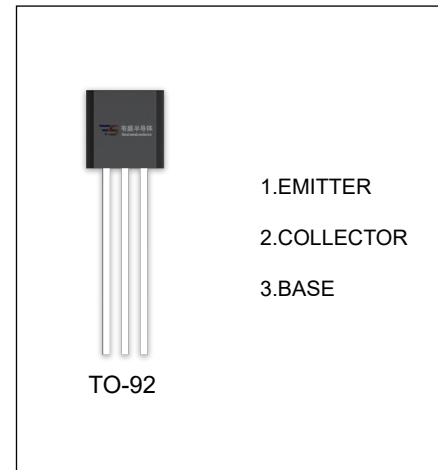


STB1277 TRANSISTOR (PNP)

FEATURES

- Audio power amplifier
- High current application
- High current : $I_C = -2A$
- Complementary pair with STD1862



ORDERING INFORMATION

| Part Number | Package | Packing Method | Pack Quantity |
|-------------|---------|----------------|---------------|
| STB1277 | TO-92 | Bulk | 1000pcs/Bag |
| STB1277-TA | TO-92 | Tape | 2000pcs/Box |

MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$ unless otherwise noted)

| Symbol | Parameter | Value | Unit |
|----------------|--|---------|------------------|
| V_{CB0} | Collector-Base Voltage | -30 V | |
| V_{CE0} | Collector-Emitter Voltage | -30 V | |
| V_{EB0} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current -Continuous | -2 | A |
| P_C | Collector Power Dissipation | 625 | mW |
| T_J, T_{stg} | Operation Junction and Storage Temperature Range | -55-150 | $^\circ\text{C}$ |

$T_a=25\text{ }^\circ\text{C}$ unless otherwise specified

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|--|-----|-----|------|---------------|
| Collector-base breakdown voltage | V_{CBO} | $I_C = -100\mu\text{A}, I_E = 0$ -30 | | | | V |
| Collector-emitter breakdown voltage | V_{CEO} | $I_C = -1\text{mA}, I_B = 0$ -30 | | | | V |
| Emitter-base breakdown voltage | V_{EBO} | $I_E = -1\text{mA}, I_C = 0$ -5 | | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB} = -30\text{V}, I_E = 0$ | | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -5\text{V}, I_C = 0$ | | | -0.1 | μA |
| DC current gain | h_{FE} | $V_{CE} = -2\text{V}, I_C = -500\text{mA}$ | 100 | | 320 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -2\text{A}, I_B = -0.2\text{A}$ | | | -0.8 | V |
| Base-emitter on voltage | $V_{BE(on)}$ | $V_{CE} = -2\text{V}, I_C = -500\text{mA}$ | | | -1 | V |
| Transition frequency | f_T | $V_{CE} = -5\text{V}, I_C = -50\text{mA}$ | | 170 | | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$ | 48 | | | pF |

CLASSIFICATION h_{FE}

| Rank | O | Y |
|-------|---------|----------|
| Range | 100-200 | 160- 320 |