

# SILICON PNP TRANSISTOR EPITAXIAL PLANAR TYPE (PCT PROCESS)

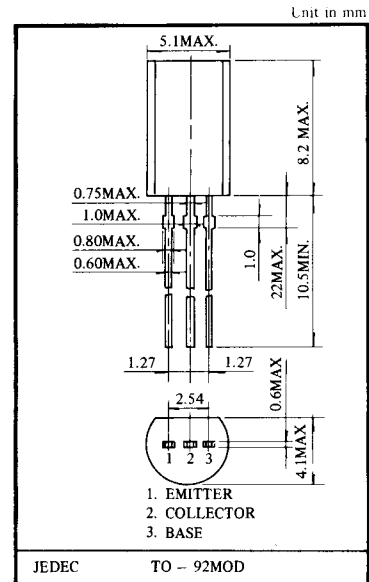
# 2SA1273

## APPLICATIONS

- Audio Power Amplifier Applications.

## FEATURES

- Complementary to 2SC 3205 and 3 Watts Output Applications.



## MAXIMUM RATINGS (Ta = 25 °C)

| CHARACTERISTIC            | SYMBOL    | RATING | UNIT | CHARACTERISTIC        | SYMBOL    | RATING    | UNIT |
|---------------------------|-----------|--------|------|-----------------------|-----------|-----------|------|
| Collector-Base Voltage    | $V_{CBO}$ | -30    | V    | Emitter Current       | $I_E$     | 2         | A    |
| Collector-Emitter Voltage | $V_{CEO}$ | -30    | V    | Collector Dissipation | $P_C$     | 1         | W    |
| Emitter-Base Voltage      | $V_{EBO}$ | -5     | V    | Junction Temperature  | $T_j$     | 150       | °C   |
| Collector Current         | $I_C$     | -2     | A    | Storage Temperature   | $T_{stg}$ | -55 ~ 150 | °C   |

## ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

| CHARACTERISTIC                       | SYMBOL        | TEST CONDITION                     | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|---------------|------------------------------------|------|------|------|------|
| Collector Cut-off Current            | $I_{CBO}$     | $V_{CB} = -30V, I_E = 0$           | -    | -    | -100 | nA   |
| Emitter Cut-off Current              | $I_{EBO}$     | $V_{EB} = -5V, I_C = 0$            | -    | -    | -100 | nA   |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CEO}$ | $I_C = -10mA, I_B = 0$             | -30  | -    | -    | V    |
| Emitter-Base Breakdown Voltage       | $V_{(BR)EBO}$ | $I_E = -1mA, I_C = 0$              | -5   | -    | -    | V    |
| DC Current Gain                      | $h_{FE}$      | $V_{CE} = -2V, I_C = -500mA$       | 100  | -    | 320  |      |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = -1.5A, I_B = -0.03A$        | -    | -    | -2.0 | V    |
| Base-Emitter Voltage                 | $V_{BE}$      | $V_{CE} = -2V, I_C = -500mA$       | -    | -    | -1.0 | V    |
| Transition Frequency                 | $f_T$         | $V_{CE} = -2V, I_C = -500mA$       | -    | 120  | -    | MHz  |
| Collector Output Capacitance         | $C_{ob}$      | $V_{CB} = -10V, I_E = 0, f = 1MHz$ | -    | 48   | -    | pF   |

**NOTE: According to  $h_{FE}$ , Classified as follows.**

|   |           |   |           |
|---|-----------|---|-----------|
| 0 | 100 - 200 | Y | 160 - 320 |
|---|-----------|---|-----------|