

SILICON PNP TRANSISTOR EPITAXIAL PLANAR TYPE (PCT PROCESS)

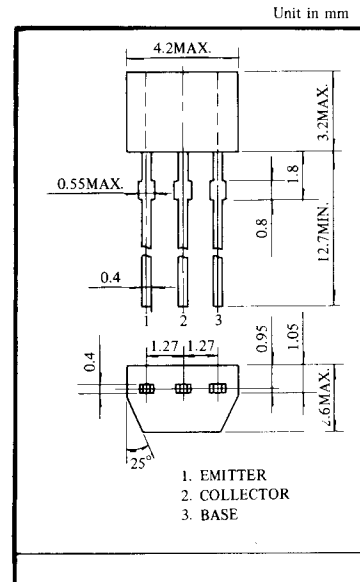
2SA1272

APPLICATION

- Low Frequency Amplifier Applications.

FEATURES

- High h_{FE} : $h_{FE}=100\sim320$.
- Complementary to 2SC3204.



MAXIMUM RATINGS (Ta=25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT | CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---------------------------|-----------|--------|------|-----------------------------|-----------|---------|------|
| Collector-Base Voltage | V_{CBO} | -35 | V | Emitter Current | I_E | 800 | mA |
| Collector-Emitter Voltage | V_{CEO} | -30 | V | Collector Power Dissipation | P_C | 300 | mW |
| Emitter-Base Voltage | V_{EBO} | -5 | V | Junction Temperature | T_J | 125 | °C |
| Collector Current | I_C | -800 | mA | Storage Temperature Range | T_{stg} | -55~125 | °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 | $V_{(BR)CEO}$ | $I_C=-10mA$ | -30 | - | - | V |
| Dc Current Gain | $h_{FE(1)}$ (NOTE) | $V_{CE}=-1V, I_C=-100mA$ | 100 | - | 320 | |
| | $h_{FE(2)}$ | $V_{CE}=-1V, I_C=-700mA$ | 35 | - | - | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=-500mA, I_B=-20mA$ | - | - | -0.7 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE}=-1V, I_C=-10mA$ | -0.5 | - | -0.8 | V |
| Transition Frequency | f_T | $V_{CE}=-5V, I_C=-10mA$ | - | 120 | - | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB}=-10V, f=1MHz$ | - | 19 | - | pF |

NOTE: According to $h_{FE(1)}$, Classified as follows.

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