

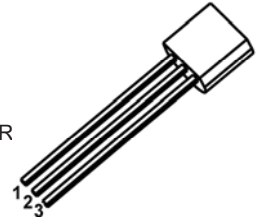
2SA1081 TRANSISTOR (PNP)

FEATURES

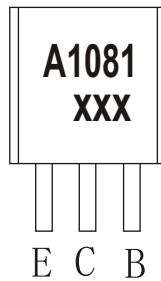
- Low Frequency Amplifier

TO - 92

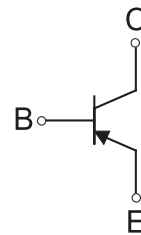
1. EMITTER
2. COLLECTOR
3. BASE



MARKING



Equivalent Circuit



ORDERING INFORMATION

| Part Number | Package | Packing Method | Pack Quantity |
|-------------|---------|----------------|---------------|
| 2SA1081 | TO-92 | Bulk | 1000pcs/Bag |
| | | | |

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

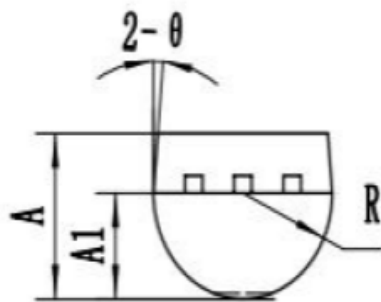
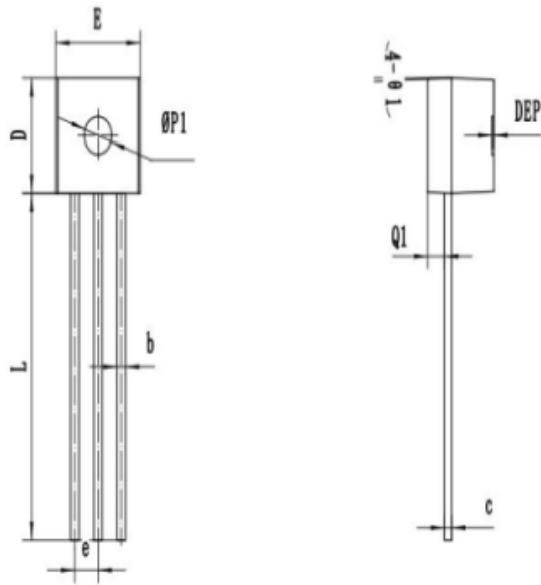
| Symbol | Parameter | Value | Unit |
|-----------------------------------|--|----------|-------|
| V _{CB0} | Collector-Base Voltage | -90 | V |
| V _{CE0} | Collector-Emitter Voltage | -90 | V |
| V _{EB0} | Emitter-Base Voltage | -5 | V |
| I _c | Collector Current -Continuous | -0.1 | A |
| P _D | Collector Power Dissipation | 400 | mW |
| R _{θJA} | Thermal Resistance from Junction to Ambient | 312 | °C /W |
| T _J , T _{stg} | Operation Junction and Storage Temperature Range | -55~+150 | °C |

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

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|--|-----|------|------|---------------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=-0.01\text{mA}, I_E=0$ | -90 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=-1\text{mA}, I_B=0$ | -90 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=-0.01\text{mA}, I_C=0$ | -5 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=-50\text{V}, I_E=0$ | | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=-2\text{V}, I_C=0$ | | | -0.1 | μA |
| DC current gain | h_{FE} | $V_{CE}=-12\text{V}, I_C=-2\text{mA}$ | 250 | | 800 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=-10\text{mA}, I_B=-1\text{mA}$ | | | -0.2 | V |
| Base-emitter voltage | V_{BE} | $V_{CE}=-12\text{V}, I_C=-2\text{mA}$ | | -0.6 | | 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 | $V_{CE}=-12\text{V}, I_C=-2\text{mA}$ | | 90 | | MHz |

CLASSIFICATION OF h_{FE}

| RANK | D | E |
|-------|---------|---------|
| RANGE | 250-500 | 400-800 |



| SYMBOL | MM | | |
|---------|-------|-------|-------|
| | MIN | NOM | MAX |
| *A | 3.00 | 3.25 | 3.50 |
| A1 | 2.20 | 2.30 | 2.40 |
| *b | 0.40 | 0.45 | 0.50 |
| *c | 0.25 | 0.30 | 0.35 |
| *D | 4.50 | 4.60 | 4.70 |
| *E | 4.50 | 4.60 | 4.70 |
| *e | 1.22 | 1.27 | 1.32 |
| *L | 14.00 | 14.30 | 14.60 |
| R | 2.20 | 2.30 | 2.40 |
| Q1 | 0.85 | 0.90 | 0.95 |
| θ | 3° | 5° | 7° |
| Ø1 | 1° | 3° | 5° |
| ØP1 | 1.40 | 1.50 | 1.60 |
| DEP | 0.05 | 0.10 | 0.20 |
| 带*为检验尺寸 | | | |