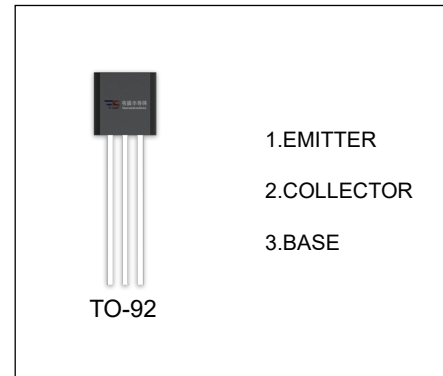


2SA836 TRANSISTOR (PNP)

FEATURES

- High DC Current Gain
- Low Frequency Amplifier



ORDERING INFORMATION

| Part Number | Package | Packing Method | Pack Quantity |
|-------------|---------|----------------|---------------|
| 2SA836 | TO-92 | Bulk | 1000pcs/Bag |
| 2SA836-TA | TO-92 | Tape | 2000pcs/Box |

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

| Symbol | Parameter | Value | Unit |
|-----------------------------------|--|----------|------|
| V _{CBO} | Collector-Base Voltage | -55 | V |
| V _{CEO} | Collector-Emitter Voltage | -55 | V |
| V _{EBO} | Emitter-Base Voltage | -5 | V |
| I _C | Collector Current | -0.1 | A |
| P _C | Collector Power Dissipation | 200 | mW |
| R _{θJA} | Thermal Resistance From Junction To Ambient | 625 | °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 | $V_{(BR)CBO}$ | $I_C=-0.01\text{mA}, I_E=0$ | -55 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=-1\text{mA}, I_B=0$ | -55 | | | 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} | $V_{CB}=-18\text{V}, I_E=0$ | | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=-2\text{V}, I_C=0$ | | | -0.05 | μA |
| DC current gain | h_{FE} | $V_{CE}=-12\text{V}, I_C=-2\text{mA}$ | 160 | | 500 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=-10\text{mA}, I_B=-1\text{mA}$ | | | -0.5 | V |
| Base-emitter voltage | V_{BE} | $V_{CE}=-12\text{V}, I_C=-2\text{mA}$ | | | -0.75 | V |
| Collector output capacitance | C_{ob} | $V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$ | | | 4 | pF |
| Transition frequency | f_T | $V_{CE}=-12\text{V}, I_C=-2\text{mA}$ | 150 | | | MHz |

CLASSIFICATION OF h_{FE}

| RANK | C | D |
|-------|---------|---------|
| RANGE | 160-320 | 250-500 |

