

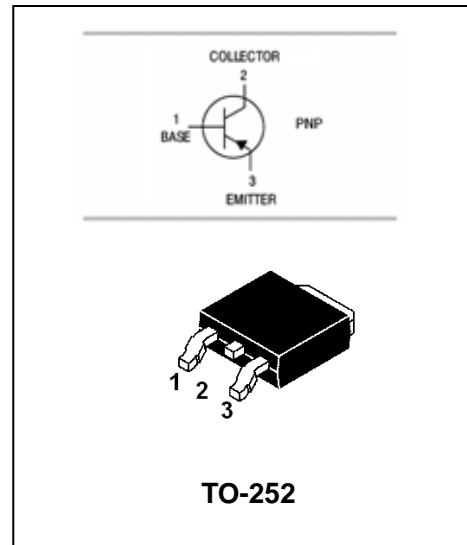
PNP Epitaxial Planar Silicon Transistor

2SA1727

FEATURES

- High breakdown voltage
- Low saturation voltage
- High switching speed

HF



Ordering Information

| Part Number | Package | Shipping | Marking Code |
|-------------|---------|---|--------------|
| 2SA1727 | TO-252 | 80 pcs / Tube or 2500 pcs / Tape & Reel | A1727 |

MAXIMUM RATING operating temperature range applies unless otherwise specified

| Symbol | Parameter | Value | Units |
|----------------|--|-------------|-------|
| V_{CBO} | Collector-Base Voltage | -400 | V |
| V_{CEO} | Collector-Emitter Voltage | -400 | V |
| V_{EBO} | Emitter-Base Voltage | -7 | V |
| I_C | Collector Current | -0.5 | A |
| P_C | Collector Power Dissipation | 1 | W |
| R_{thJ-A} | Thermal resistance junction to air | 125 | °C/W |
| T_j, T_{stg} | Junction and Storage temperature range | -55 to +150 | °C |

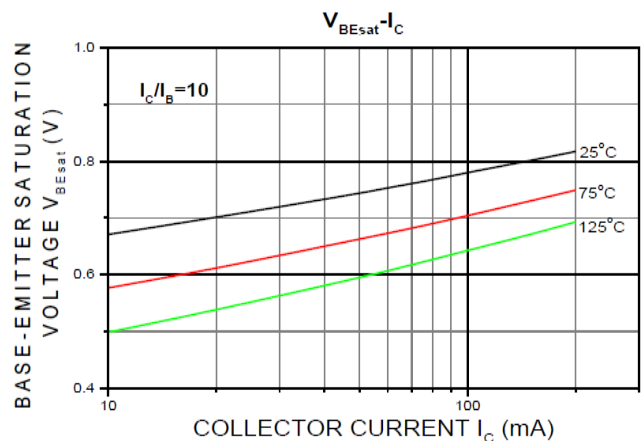
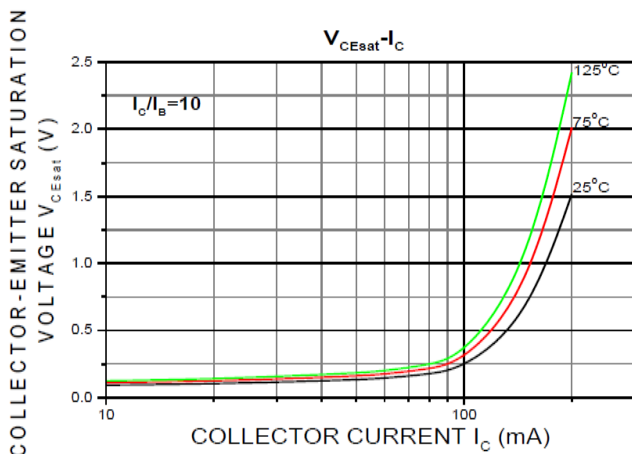
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ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

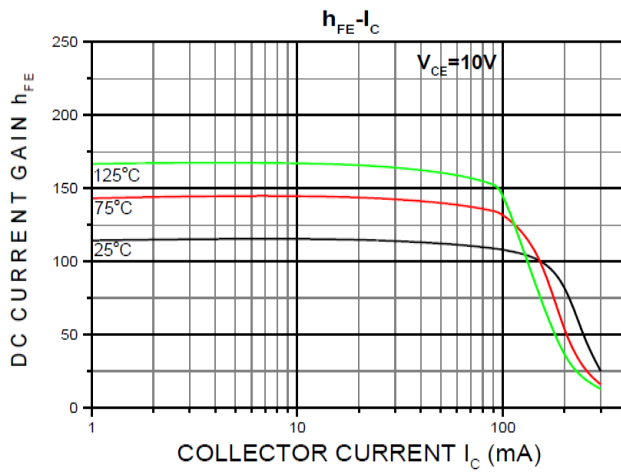
| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|---|------|-----|------|---------------|
| Collector-base breakdown voltage | BV_{CBO} | $I_C=-50\mu\text{A}, I_E=0$ | -400 | | | V |
| Collector-emitter breakdown voltage | BV_{CEO} | $I_C=-1\text{mA}, I_B=0$ | -400 | | | V |
| Emitter-base breakdown voltage | BV_{EBO} | $I_E=-50\mu\text{A}, I_C=0$ | -7 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=-400\text{V}, I_E=0$ | | | -10 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EBO}=-6\text{V}, I_C=0$ | | | -10 | μA |
| DC current gain | h_{FE} | $V_{CE}=-5\text{V}, I_C=-50\text{mA}$ | 82 | 140 | 270 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=-100\text{mA}, I_B=-10\text{mA}$ | | | -1 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C=-100\text{mA}, I_B=-10\text{mA}$ | | | -1.2 | V |
| Transition frequency | f_T | $V_{CB}=-5\text{V}, I_E=-50\text{mA}$ | | 12 | | MHz |
| Collector output capacitance | C_{ob} | $V_{CE}=-10\text{V}, f=1\text{MHz}$ | | 18 | | pF |
| Turn-ON Time | t_{on} | $I_C=-100\text{mA}, R_L=1.5\text{k}\Omega$ $I_{B1}=I_{B2}=10\text{mA}$ | | 0.6 | | μs |
| Turn-OFF Time | t_{off} | V_{CC} to -150V | | 1 | | μs |

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



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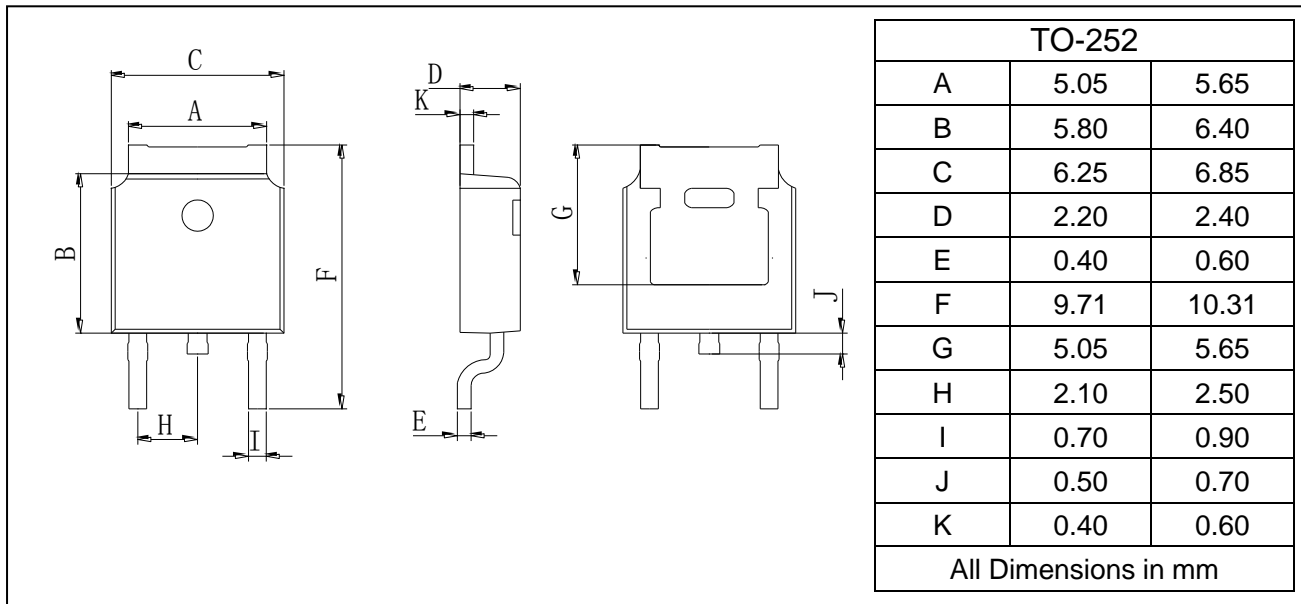
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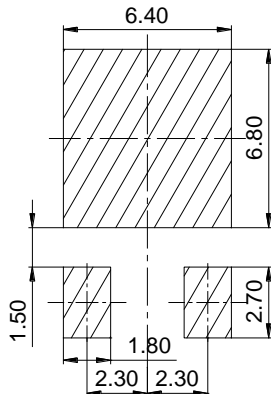
PACKAGE OUTLINE

Plastic surface mounted package

TO-252



SOLDERING FOOTPRINT



Unit: mm