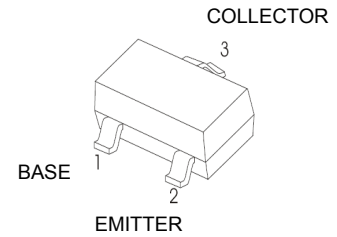




M8550 TRANSISTOR(PNP)

FEATURES

Power dissipation



MARKING: Y21

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

SOT-23

| Symbol | Parameter | Value | Unit |
|------------------|-------------------------------|---------|------|
| V _{CB0} | Collector-Base Voltage | -40 | V |
| V _{CEO} | Collector-Emitter Voltage | -25 | V |
| V _{EBO} | Emitter-Base Voltage | -6 | V |
| I _C | Collector Current -Continuous | -0.8 | A |
| P _C | Collector power dissipation | 200 | mW |
| T _J | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature | -55-150 | °C |

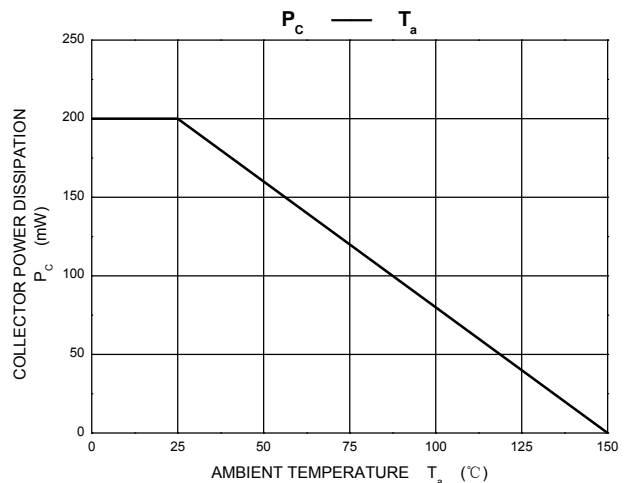
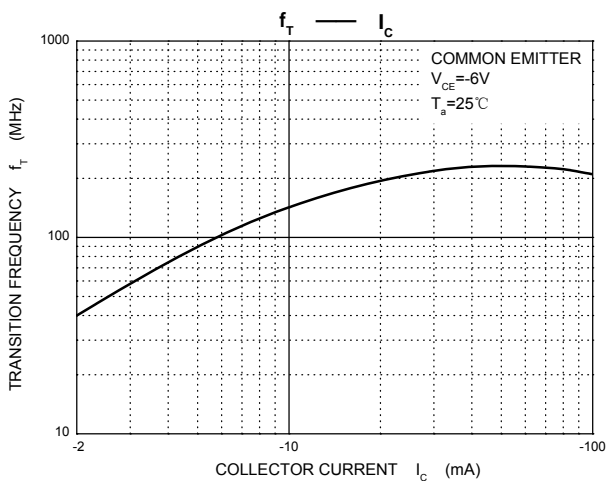
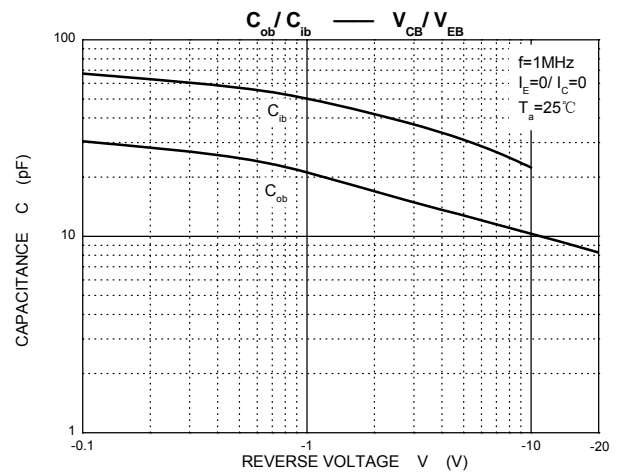
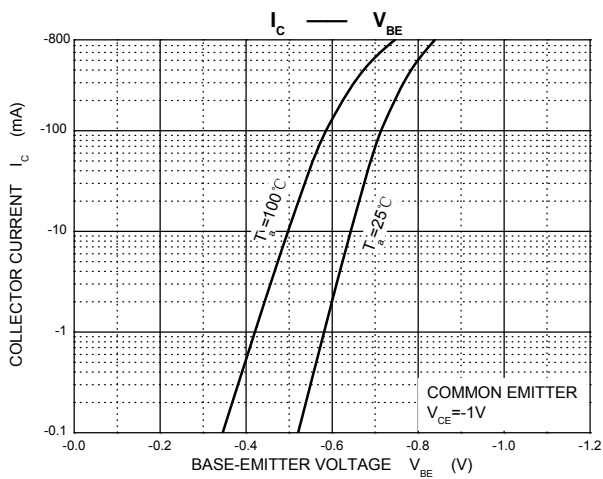
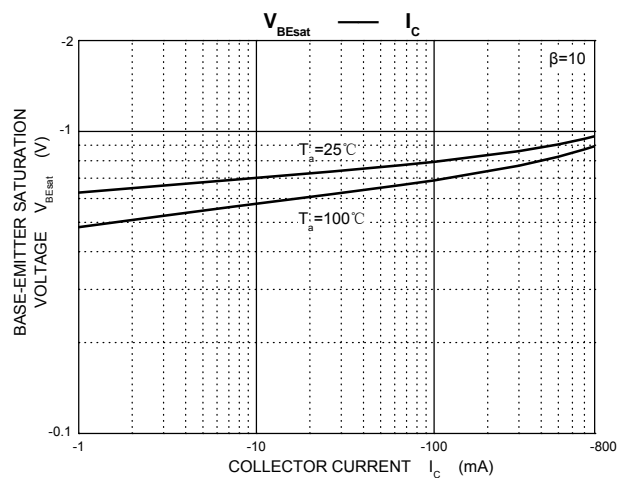
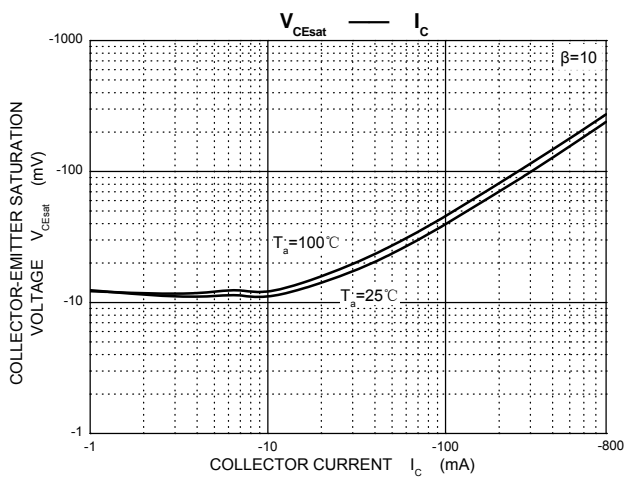
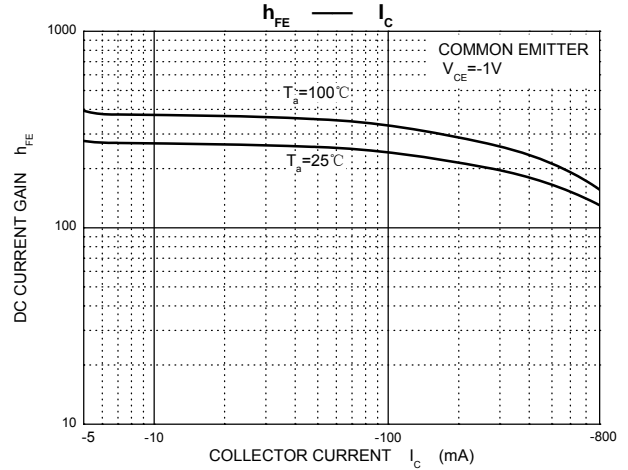
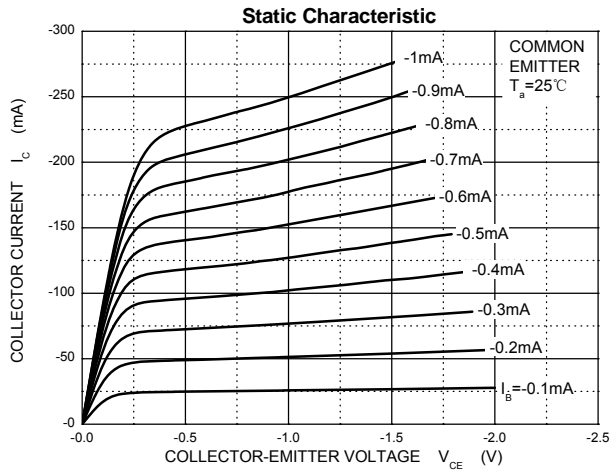
ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Max | Unit |
|--------------------------------------|------------------------|--|-----|------|------|
| Collector-base breakdown voltage | V _{(BR)CBO} | I _C = -100μA, I _E = 0 | -40 | | V |
| Collector-emitter breakdown voltage | V _{(BR)CEO} * | I _C = -1mA, I _B = 0 | -25 | | V |
| Emitter-base breakdown voltage | V _{(BR)EBO} | I _E = -100μA, I _C = 0 | -6 | | V |
| Collector cut-off current | I _{CBO} | V _{CB} = -35V, I _E = 0 | | -0.1 | μA |
| Collector cut-off current | I _{CEO} | V _{CE} = -20V, I _B = 0 | | -0.1 | μA |
| DC current gain | h _{FE(1)} | V _{CE} = -1V, I _C = -5mA | 45 | | |
| | h _{FE(2)} | V _{CE} = -1V, I _C = -100mA | 85 | 400 | |
| | h _{FE(3)} | V _{CE} = -1V, I _C = -800mA | 40 | | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C = -800mA, I _B = -80mA | | -0.5 | V |
| Base-emitter saturation voltage | V _{BE(sat)} | I _C = -800mA, I _B = -80mA | | -1.2 | V |
| Transition frequency | f _T | V _{CE} = -6V, I _C = -20mA f = 30MHz | 150 | | MHz |

* Pulse Test: pulse width ≤ 300μs, duty cycle ≤ 2%.

CLASSIFICATION OF h_{FE(2)}

| Rank | L | H |
|-------|--------|---------|
| Range | 85-300 | 300-400 |

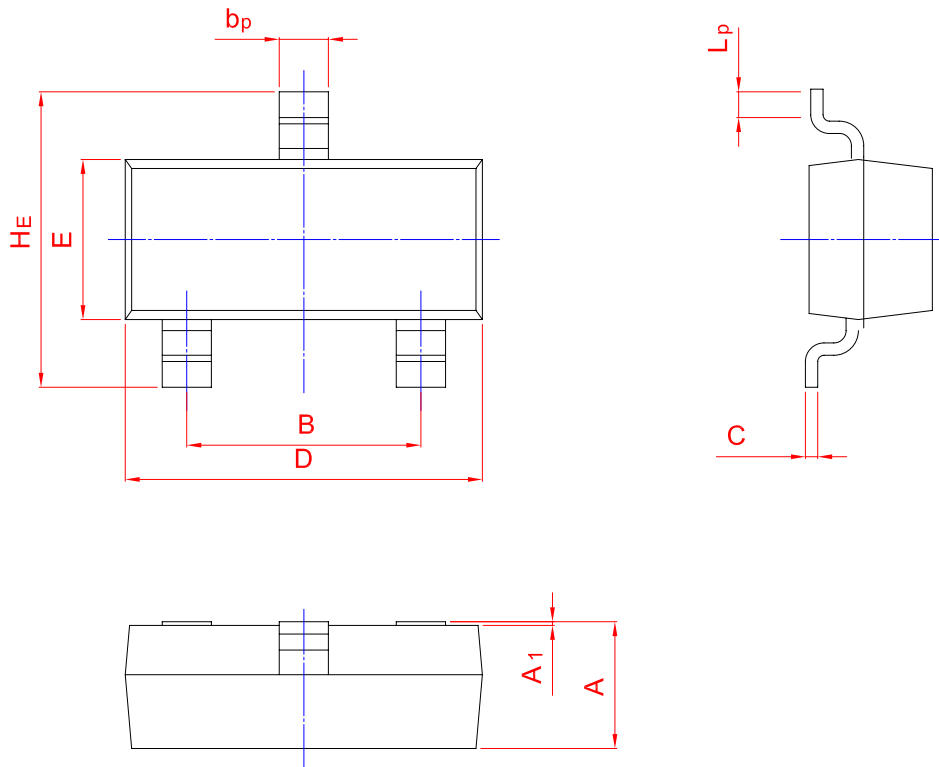
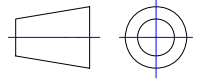




PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



| UNIT | A | B | b _p | C | D | E | H _E | A ₁ | L _p |
|------|------|------|----------------|------|------|------|----------------|----------------|----------------|
| mm | 1.40 | 2.04 | 0.50 | 0.19 | 3.10 | 1.65 | 3.00 | 0.100 | 0.50 |
| | 0.95 | 1.78 | 0.35 | 0.08 | 2.70 | 1.20 | 2.20 | 0.013 | 0.20 |