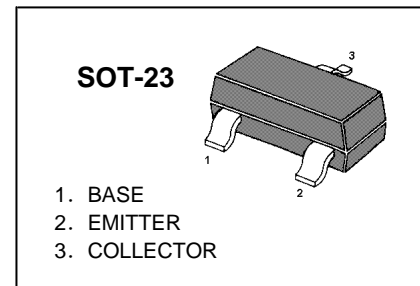


SS8550 TRANSISTOR (PNP)

FEATURES

Complimentary to SS8050

MARKING: Y2



MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

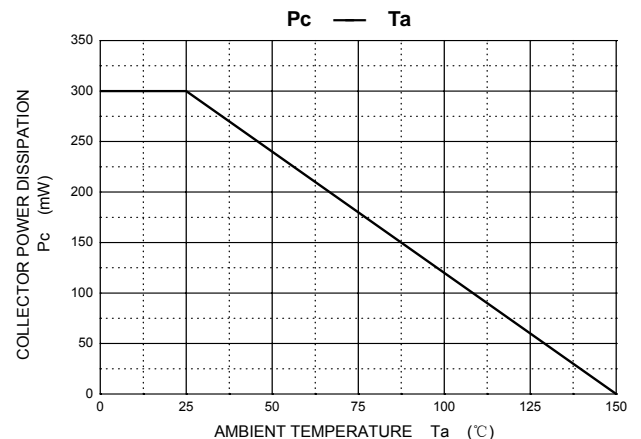
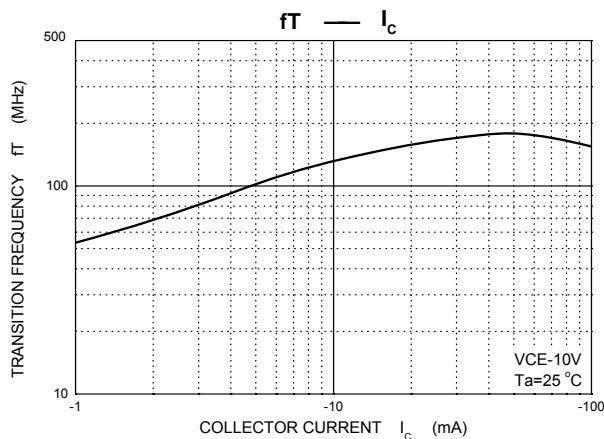
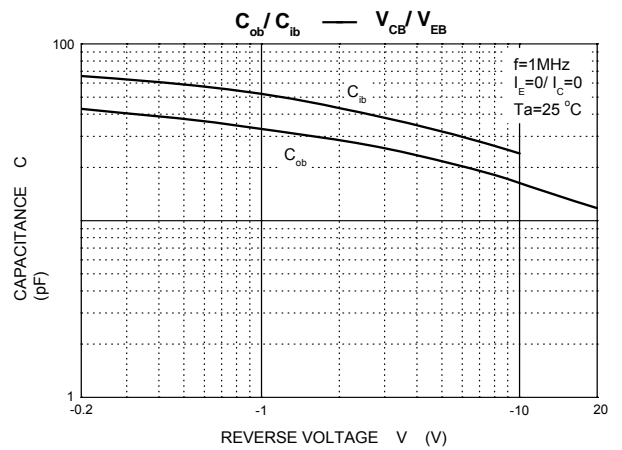
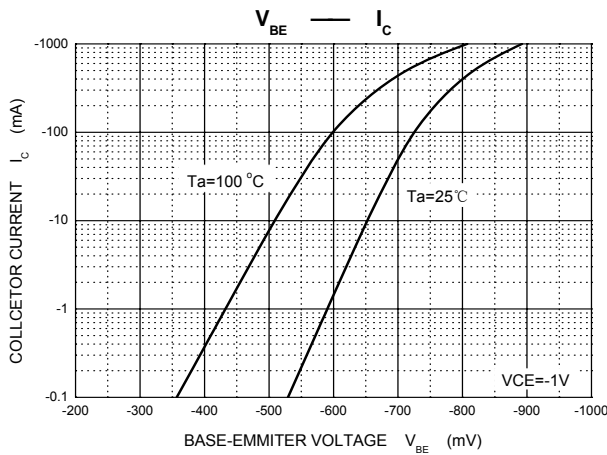
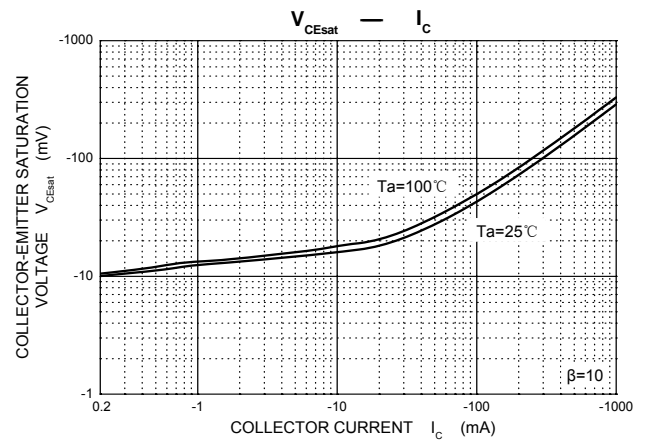
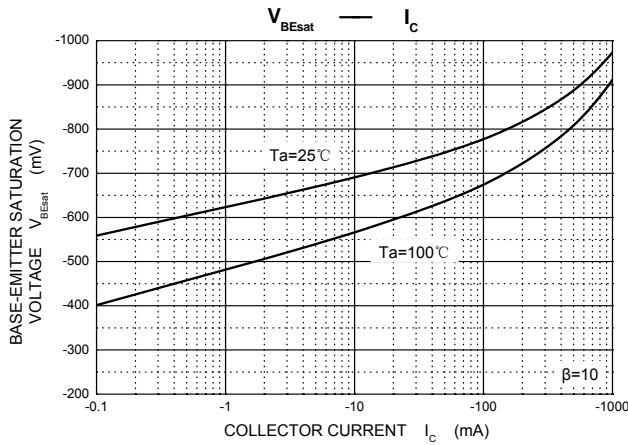
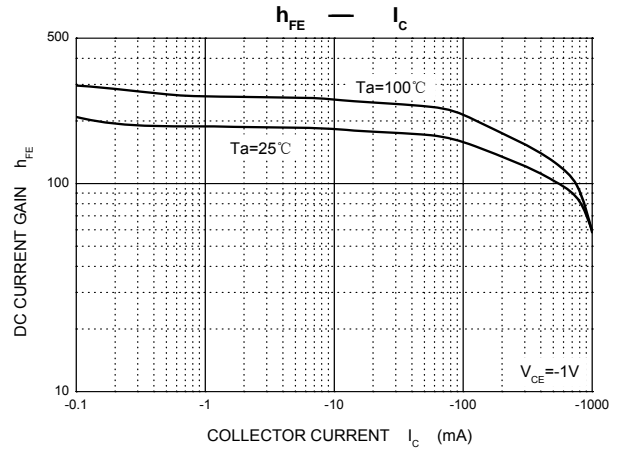
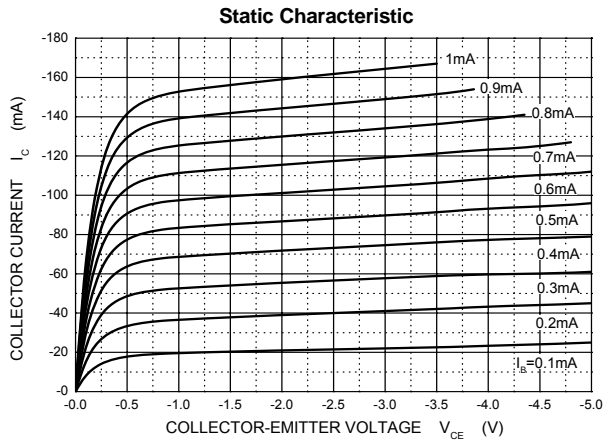
| Symbol | Parameter | Value | Units |
|----------------|---|---------|-----------------------------|
| V_{CBO} | Collector-Base Voltage | -40 | V |
| V_{CEO} | Collector-Emitter Voltage | -25 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current -Continuous | -1.5 | A |
| P_C | Collector Power Dissipation | 0.3 | W |
| T_j | Junction Temperature | 150 | $^{\circ}\text{C}$ |
| T_{stg} | Storage Temperature | -55-150 | $^{\circ}\text{C}$ |
| $R\theta_{JA}$ | Thermal Resistance, Junction-to-Ambient | 417 | $^{\circ}\text{C}/\text{W}$ |

Alumina = 0.4 x 0.3 x 0.024 in. 99.5% alumina.

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test conditions | MIN | MAX | UNIT |
|--------------------------------------|---------------|---|-----|-------|---------------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=-100\mu\text{A}$, $I_E=0$ | -40 | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=-1\text{mA}$, $I_B=0$ | -25 | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=-100\mu\text{A}$, $I_C=0$ | -5 | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=-40\text{V}$, $I_E=0$ | | -0.1 | μA |
| Collector cut-off current | I_{CEO} | $V_{CE}=-20\text{V}$, $I_B=0$ | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=-5\text{V}$, $I_C=0$ | | -0.1 | μA |
| DC current gain | $h_{FE(1)}$ | $V_{CE}=-1\text{V}$, $I_C=-100\text{mA}$ | 200 | 350 | |
| | $h_{FE(2)}$ | $V_{CE}=-1\text{V}$, $I_C=-800\text{mA}$ | 40 | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=-800\text{mA}$, $I_B=-80\text{mA}$ | | -0.5 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C=-800\text{mA}$, $I_B=-80\text{mA}$ | | -1.2 | V |
| Base-emitter on voltage | $V_{BE(on)}$ | $I_C=-1\text{V}$, $V_{CE}=-10\text{mA}$ | | -1 | V |
| Base-emitter positive favor voltage | V_{BEF} | $I_B=-1\text{A}$ | | -1.55 | V |
| Transition frequency | f_T | $V_{CE}=-10\text{V}$, $I_C=-50\text{mA}$ $f=30\text{MHz}$ | 100 | | MHz |
| output capacitance | C_{ob} | $(V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz})$ | | 20 | pF |

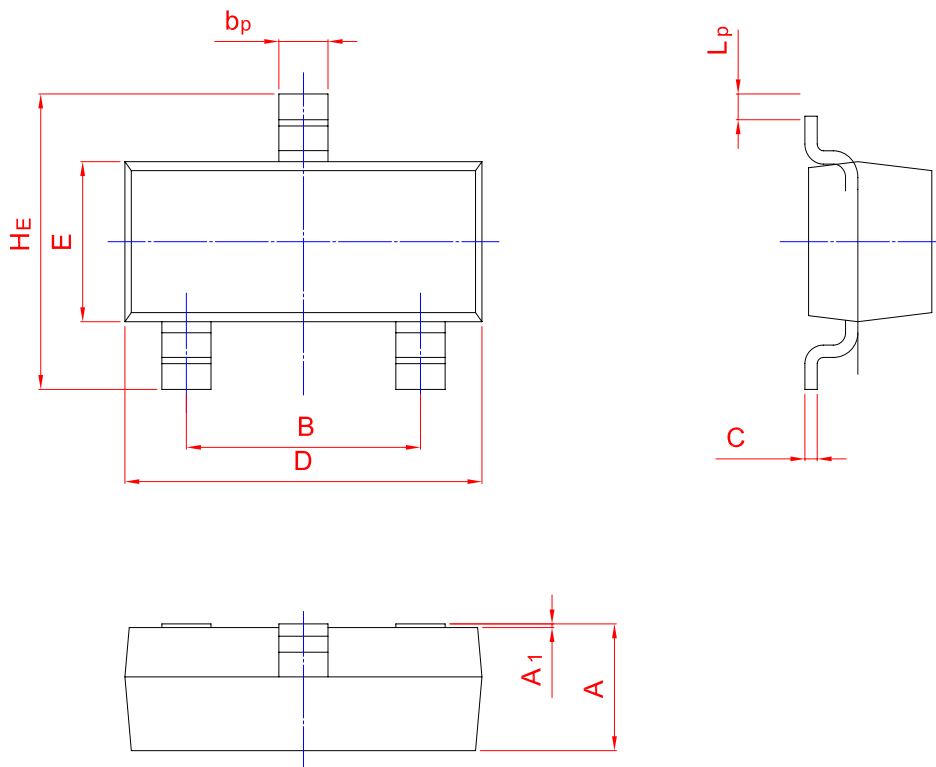
Typical Characteristics



PACKAGE OUTLINE

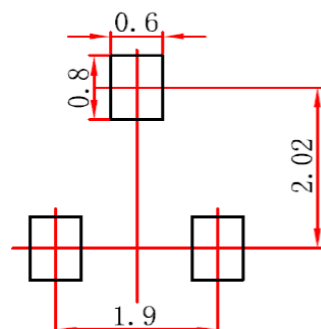
Plastic surface mounted package; 3 leads

SOT-23



| UNIT | A | B | b_p | C | D | E | H_E | A_1 | L_p |
|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------------|
| mm | 1.40 0.95 | 2.04 1.78 | 0.50 0.35 | 0.19 0.08 | 3.10 2.70 | 1.65 1.20 | 3.00 2.20 | 0.100 0.013 | 0.50 0.20 |

SOT-23 SUGGESTED PAD LAYOUT

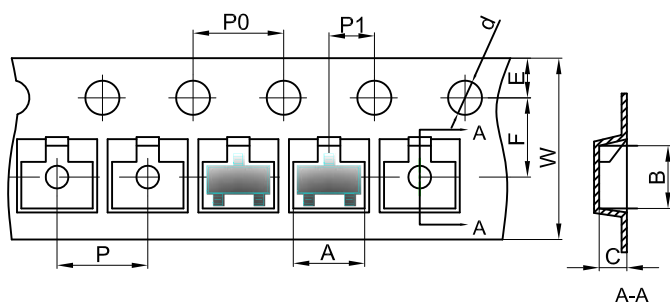


Note:

1. Controlling dimension in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purpose only.

SOT-23 Tape and Reel

SOT-23 Embossed Carrier Tape

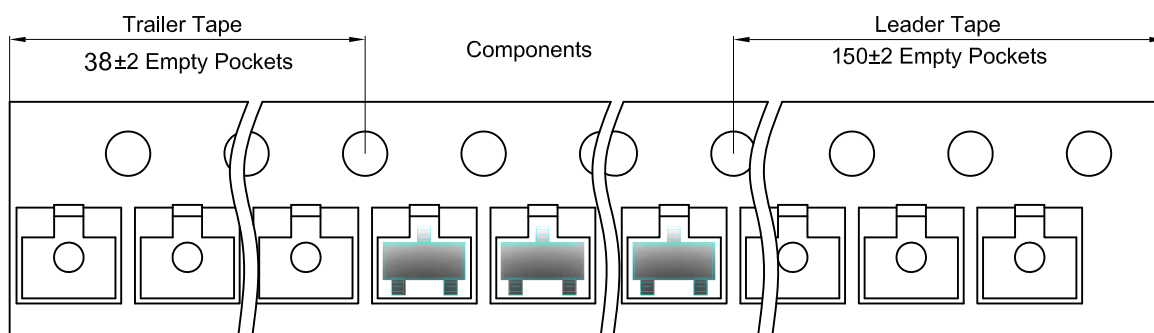


Packaging Description:

SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

| Dimensions are in millimeter | | | | | | | | | | |
|------------------------------|------|------|------|-------|------|------|------|------|------|------|
| Pkg type | A | B | C | d | E | F | P0 | P | P1 | W |
| SOT-23 | 3.15 | 2.77 | 1.22 | Ø1.55 | 1.75 | 3.50 | 4.00 | 4.00 | 2.00 | 8.00 |

SOT-23 Tape Leader and Trailer



DISCLAIMER

- Before you use our Products, you are requested to carefully read this document and fully understand its contents. BLUECOLOUR shall not be in any way responsible or liable for failure, malfunction or accident arising from the use of any BLUECOLOUR's Products against warning, caution or note contained in this document.
- All information contained in this document is current as of the issuing date and subject to change without any prior notice. Before purchasing or using BLUECOLOUR's Products, please confirm the latest information with a BLUECOLOUR sales representative.