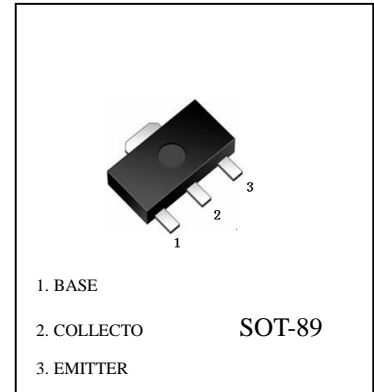


FEATURES

- Low $V_{CE(sat)}$: -0.2V(Typ) $I_C/I_B=-500mA/-50mA$
- Compliments 2SD1664

Maximum Ratings (Ta=25 °C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|-------------------------------|-----------|------------|------|
| Collector-Base Voltage | V_{CBO} | -40 | V |
| Collector-Emitter Voltage | V_{CEO} | -32 | V |
| Emitter-Base Voltage | V_{EBO} | -5 | V |
| Collector Current -Continuous | I_C | 1 | A |
| Collector Power dissipation | P_C | 500 | mW |
| Junction Temperature | T_J | 150 | °C |
| Storage Temperature | T_{stg} | -55to +150 | °C |

2SB1132 (PNP)

ELECTRICAL CHARACTERISTICS (@ Ta=25 °C unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|----------------------------------|-----|------|------|---------|
| Collector-base breakdown voltage | V_{CBO} | $I_C=-50\mu A, I_E=0$ | -40 | | | V |
| Collector-emitter breakdown voltage | V_{CEO} | $I_C=-1mA, I_B=0$ | -32 | | | V |
| Emitter-base breakdown voltage | V_{EBO} | $I_E=-50\mu A, I_C=0$ | -5 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=-20V, I_E=0$ | | | -0.5 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=-4V, I_C=0$ | | | -0.5 | μA |
| DC current gain | h_{FE} | $V_{CE}=-3V, I_C=-100mA$ | 82 | | 390 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=-500mA, I_B=-50mA$ | | -0.2 | -0.5 | V |
| Transition frequency | f_T | $V_{CE}=-5V, I_C=-50mA, f=30MHz$ | | 150 | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB}=-10V, I_E=0, f=1MHz$ | | 20 | 30 | pF |

CLASSIFICATION OF h_{FE}

| Rank | P | Q | R |
|---------|--------|---------|---------|
| Range | 80-180 | 120-270 | 180-390 |
| Marking | BAP | BAQ | BAR |

2SB1132 Typical Characteristics

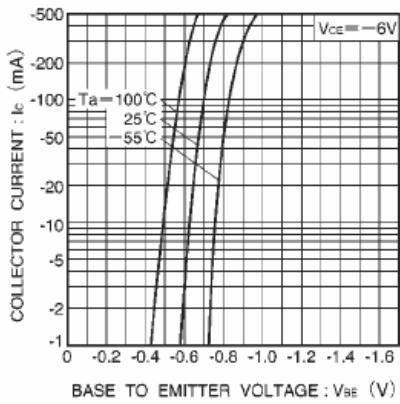


Fig.1 Grounded emitter propagation characteristics

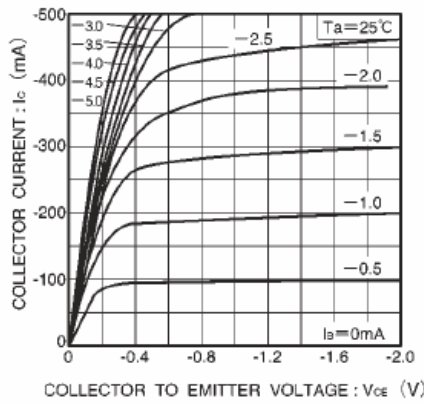


Fig.2 Grounded emitter output characteristics

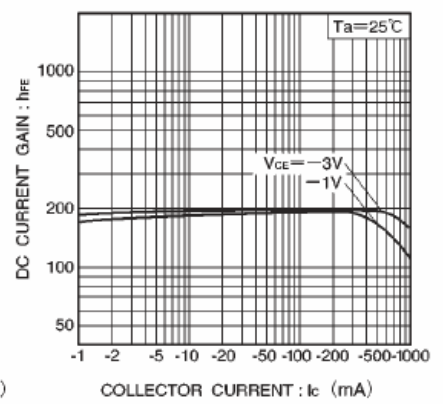


Fig.3 DC current gain vs. collector current (I)

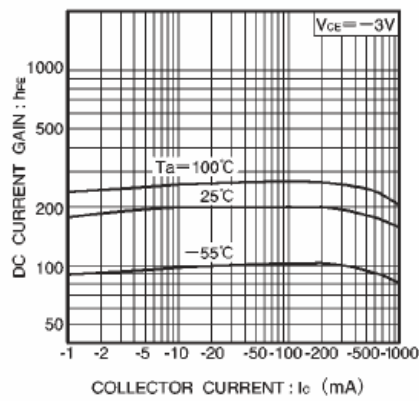


Fig.4 DC current gain vs. collector current (II)

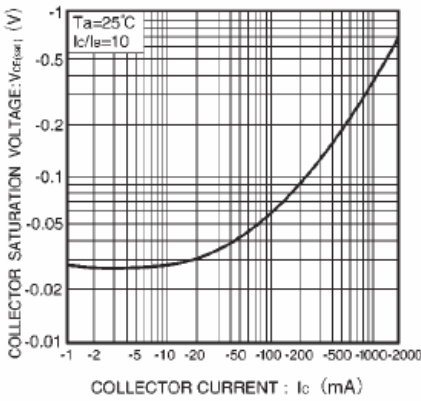


Fig.5 Collector-emitter saturation voltage vs. collector current

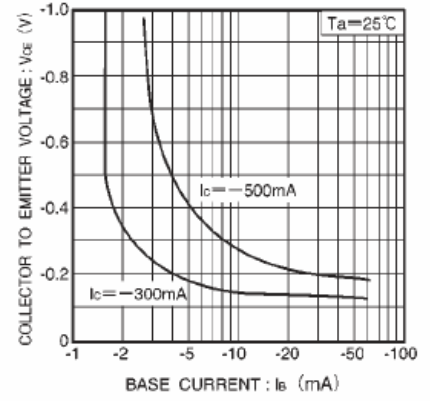


Fig.6 Collector-emitter saturation voltage vs. base current

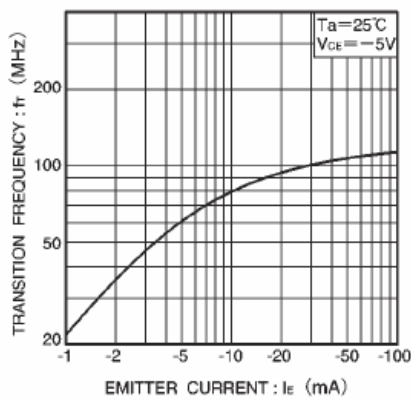


Fig.7 Gain bandwidth product vs. emitter current

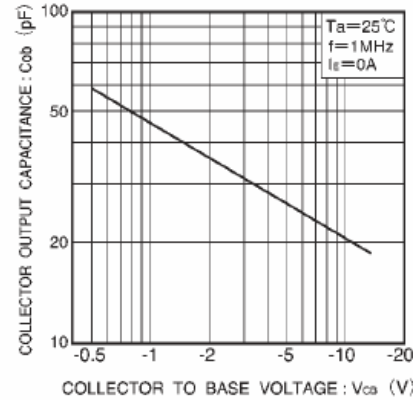


Fig.8 Collector output capacitance vs. collector-base voltage

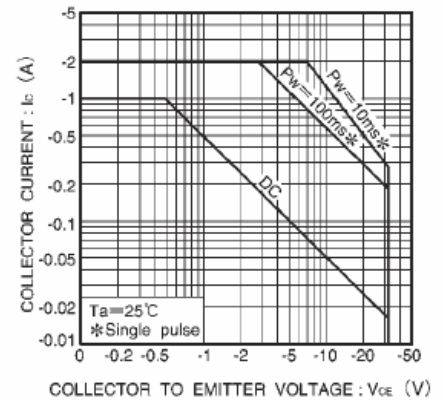


Fig.9 Safe operation area