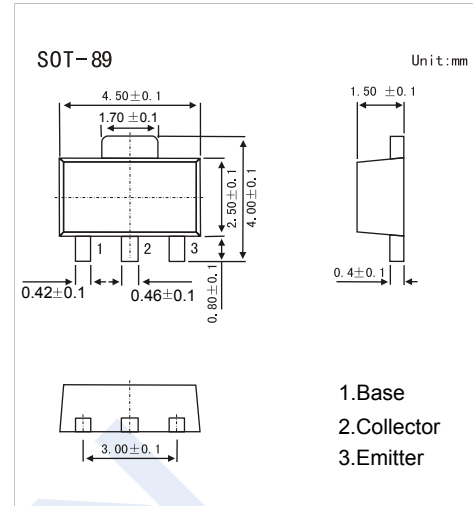


PNP Transistors

2SB804

■ Features

- World standard miniature package: SOT-89
- High collector to base voltage: $V_{CB0} > -100V$
- Excell DC Current gain linearity.

■ Absolute Maximum Ratings $T_a = 25^\circ C$

| Parameter | Symbol | Rating | Unit |
|--------------------------------|-----------|------------|------------|
| Collector - Base Voltage | V_{CB0} | -100 | V |
| Collector - Emitter Voltage | V_{CE0} | -80 | |
| Emitter - Base Voltage | V_{EB0} | -5 | |
| Collector Current - Continuous | I_c | -1.0 | A |
| Collector Current -Pulse * | | -1.5 | |
| Collector Power Dissipation | P_c | 2.0 | W |
| Junction Temperature | T_j | 150 | $^\circ C$ |
| Storage Temperature range | T_{stg} | -55 to 150 | |

* $PW \leq 10$ ms, duty cycle $\leq 50\%$

■ Electrical Characteristics $T_a = 25^\circ C$

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---------------|-------------------------------------|------|-------|------|------|
| Collector- base breakdown voltage | V_{CB0} | $I_c = -100 \mu A, I_E = 0$ | -100 | | | V |
| Collector- emitter breakdown voltage | V_{CE0} | $I_c = -1$ mA, $I_b = 0$ | -80 | | | |
| Emitter - base breakdown voltage | V_{EB0} | $I_E = -100 \mu A, I_c = 0$ | -5 | | | |
| Collector cutoff current | I_{c0} | $V_{CB} = -100V, I_E = 0$ | | | -100 | nA |
| Emitter cutoff current | I_{E0} | $V_{EB} = -5V, I_c = 0$ | | | -100 | |
| Collector-emitter saturation voltage *1 | $V_{CE(sat)}$ | $I_c = -500$ mA, $I_b = -50$ mA | | -0.29 | -0.5 | V |
| Base - emitter saturation voltage *1 | $V_{BE(sat)}$ | $I_c = -500$ mA, $I_b = -50$ mA | | -0.9 | -1.5 | |
| Base - emitter voltage *1 | V_{BE} | $V_{CE} = -10V, I_c = -10$ mA | -600 | -840 | -700 | |
| DC current gain *1 | $h_{FE(1)}$ | $V_{CE} = -2.0V, I_c = -100$ mA | 90 | 200 | 400 | |
| | $h_{FE(2)}$ | $V_{CE} = -2.0V, I_c = -500$ mA | 25 | 80 | | |
| Collector output capacitance | C_{ob} | $V_{CE} = -5.0V, I_E = 0$ | | 26 | | pF |
| Transition frequency | f_T | $V_{CE} = -10V, I_E = 0, f = 1$ MHz | | 80 | | MHz |

*1 Pulsed: $PW \leq 350 \mu s$, duty cycle $\leq 2\%$

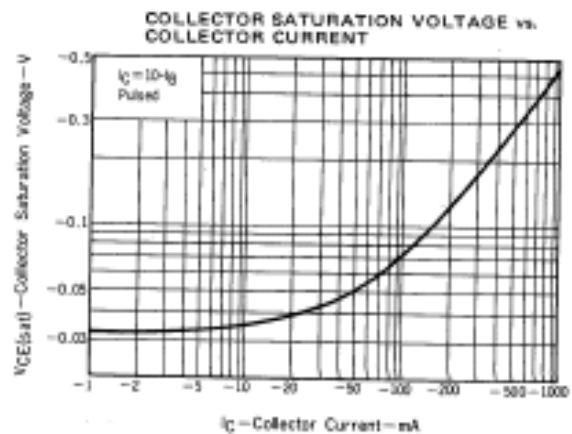
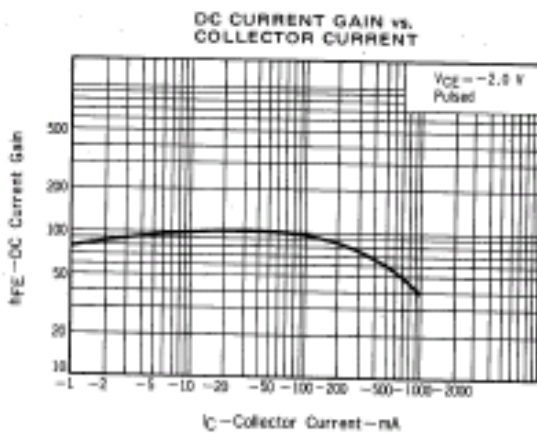
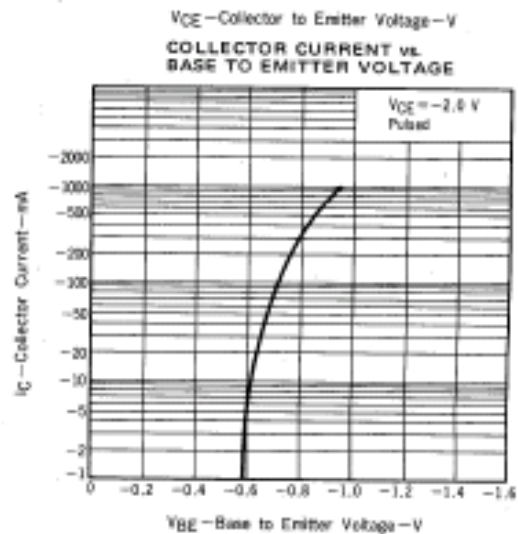
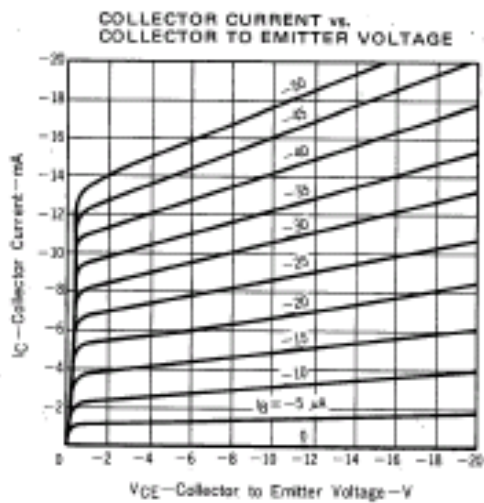
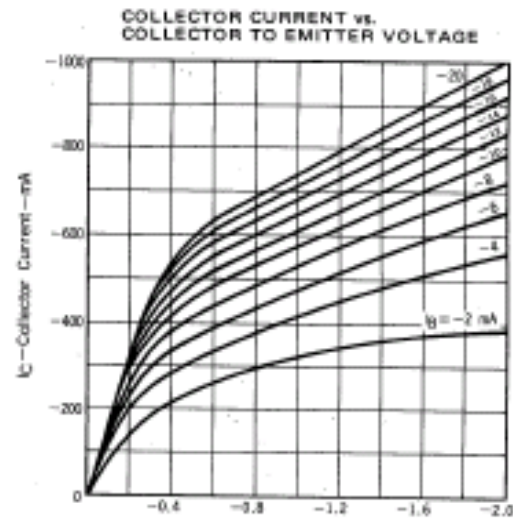
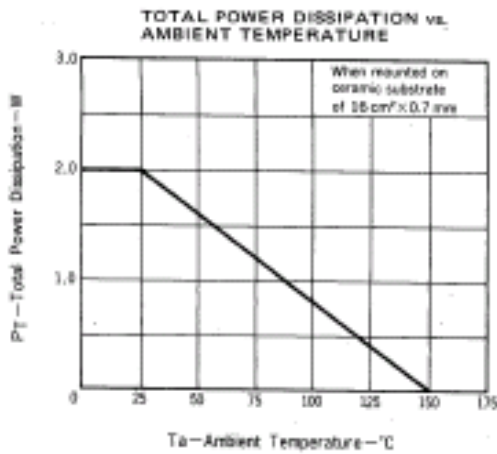
■ Classification of $h_{FE(1)}$

| Marking | AW | AV | AU |
|----------|--------|---------|---------|
| h_{FE} | 90~180 | 135~270 | 200~400 |

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■ Typical Characteristics



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■ Typical Characteristics

