
2SB562

Silicon PNP Epitaxial

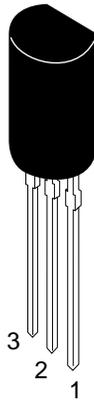
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Application

- Low frequency power amplifier
- Complementary pair with 2SD468

Outline

TO-92MOD



1. Emitter
2. Collector
3. Base

Absolute Maximum Ratings (Ta = 25°C)

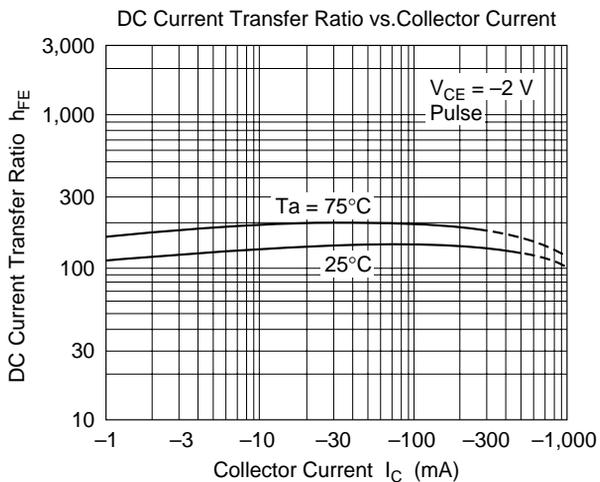
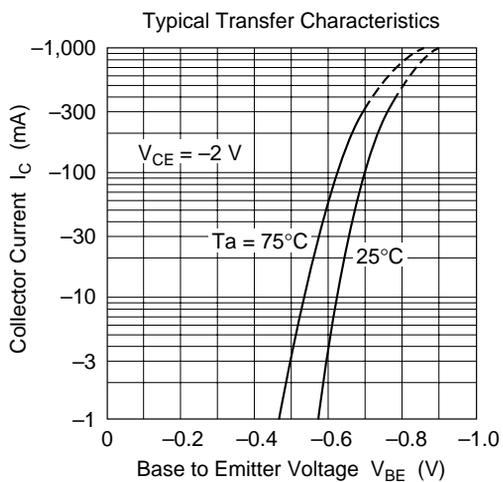
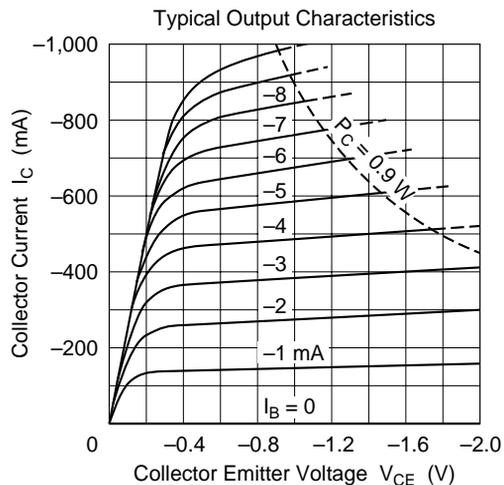
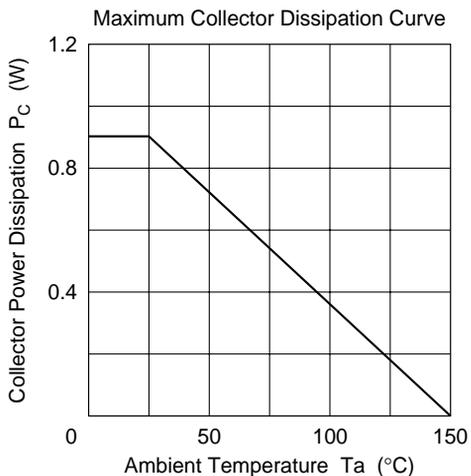
| Item | Symbol | Ratings | Unit |
|------------------------------|----------------------|-------------|------|
| Collector to base voltage | V_{CBO} | -25 | V |
| Collector to emitter voltage | V_{CEO} | -20 | V |
| Emitter to base voltage | V_{EBO} | -5 | V |
| Collector current | I_C | -1.0 | A |
| Collector peak current | $i_{C(\text{peak})}$ | -1.5 | A |
| Collector power dissipation | P_C | 0.9 | W |
| Junction temperature | Tj | 150 | °C |
| Storage temperature | Tstg | -55 to +150 | °C |

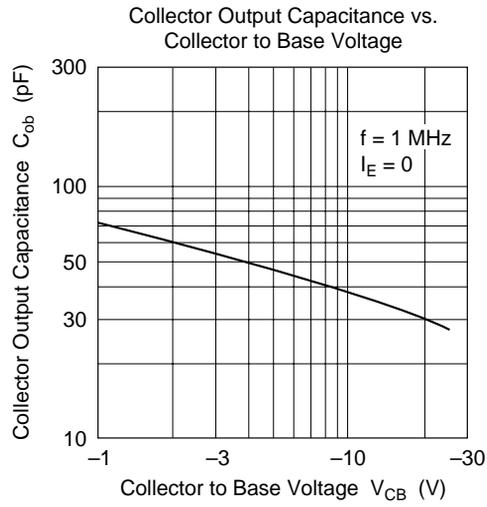
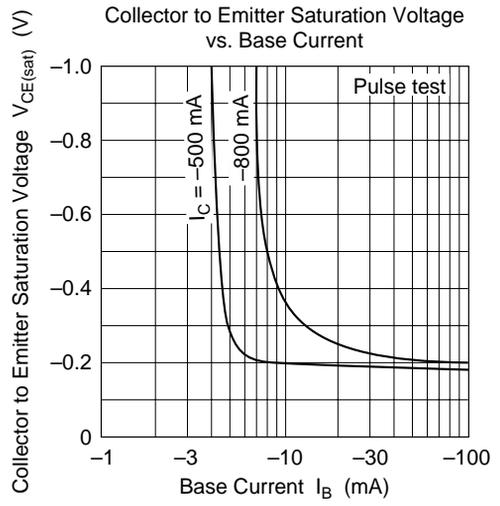
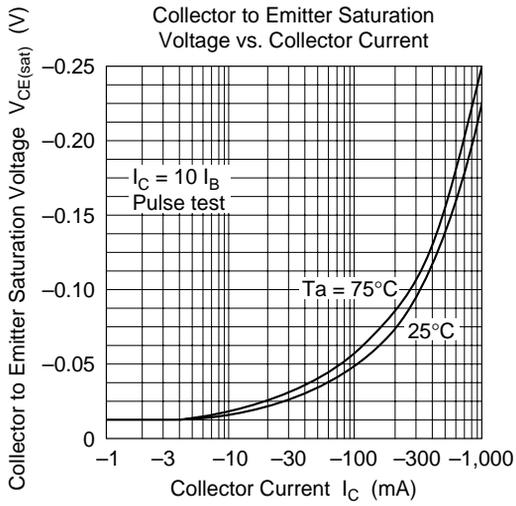
Electrical Characteristics (Ta = 25°C)

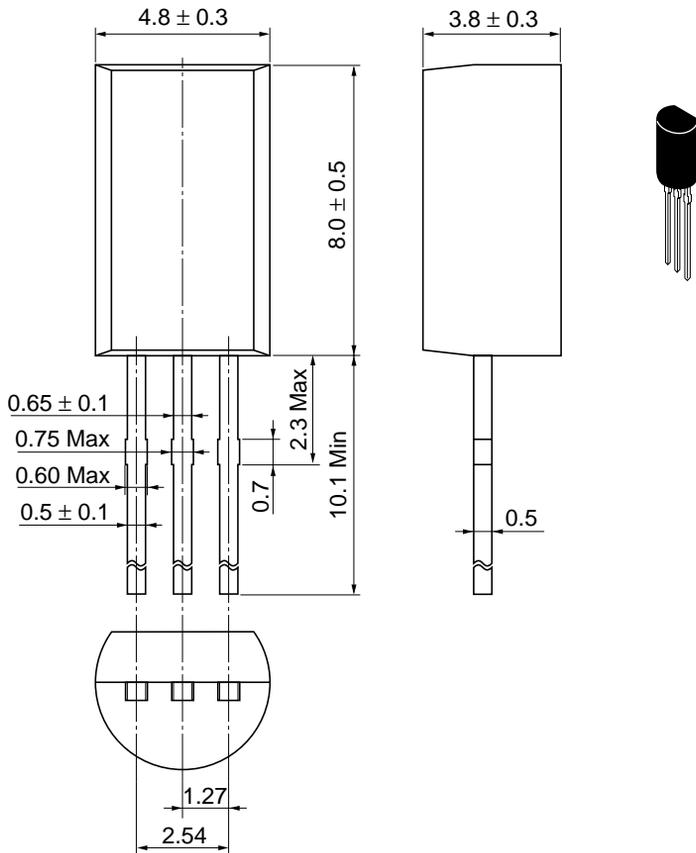
| Item | Symbol | Min | Typ | Max | Unit | Test conditions |
|---|----------------------|-----|------|------|---------------|--|
| Collector to base breakdown voltage | $V_{(BR)CBO}$ | -25 | — | — | V | $I_C = -10 \mu\text{A}$, $I_E = 0$ |
| Collector to emitter breakdown voltage | $V_{(BR)CEO}$ | -20 | — | — | V | $I_C = -1 \text{ mA}$, $R_{BE} = \infty$ |
| Emitter to base breakdown voltage | $V_{(BR)EBO}$ | -5 | — | — | V | $I_E = -10 \mu\text{A}$, $I_C = 0$ |
| Collector cutoff current | I_{CBO} | — | — | -1.0 | μA | $V_{CB} = -20 \text{ V}$, $I_E = 0$ |
| DC current transfer ratio | h_{FE}^{*1} | 85 | — | 240 | | $V_{CE} = -2 \text{ V}$, $I_C = -0.5 \text{ A}$ (Pulse test) |
| Collector to emitter saturation voltage | $V_{CE(\text{sat})}$ | — | -0.2 | -0.5 | V | $I_C = -0.8 \text{ A}$, $I_B = -0.08 \text{ A}$ (Pulse test) |
| Base to emitter voltage | V_{BE} | — | -0.8 | -1.0 | V | $V_{CE} = -2 \text{ V}$, $I_C = -0.5 \text{ A}$ (Pulse test) |
| Gain bandwidth product | f_T | — | 350 | — | MHz | $V_{CE} = -2 \text{ V}$, $I_C = -0.5 \text{ A}$ (Pulse test) |
| Collector output capacitance | Cob | — | 38 | — | pF | $V_{CB} = -10 \text{ V}$, $I_E = 0$ $f = 1 \text{ MHz}$ |

Note: 1. The 2SB562 is grouped by h_{FE} as follows.

| B | C |
|-----------|------------|
| 85 to 170 | 120 to 240 |







| | |
|--------------------------|-----------|
| Hitachi Code | TO-92 Mod |
| JEDEC | — |
| EIAJ | Conforms |
| Weight (reference value) | 0.35 g |

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