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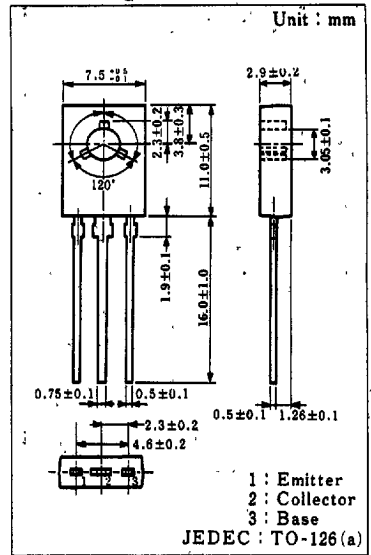
Silicon NPN Epitaxial Planar Type

AF Power Amplifier
For Strobo, Converter

■ Features

- Low collector-emitter saturation voltage ($V_{CE(sat)}$)
- High performance and good operating characteristics at low supply voltage

■ Package Dimensions



■ Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

| Item | Symbol | Value | Unit |
|--|-----------|------------|------------------|
| Collector-base voltage | V_{CBO} | 40 | V |
| Collector-emitter voltage | V_{CEO} | 20 | V |
| Emitter-base voltage | V_{EBO} | 7 | V |
| Peak collector current | I_{CP} | 7 | A |
| Collector current | I_C | 5 | A |
| Collector power dissipation ($T_c=25^\circ\text{C}$) | P_C | 10 | W |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 ~ +150 | $^\circ\text{C}$ |

■ Electrical Characteristics ($T_c=25^\circ\text{C}$)

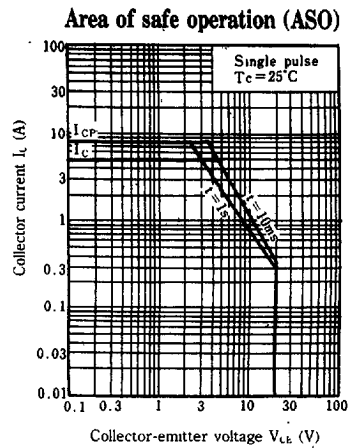
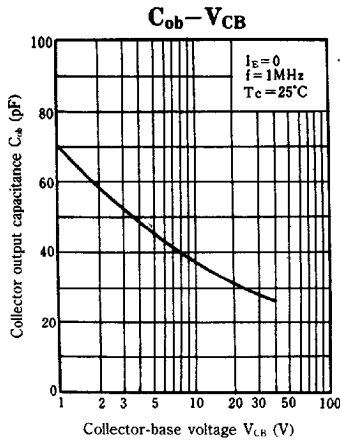
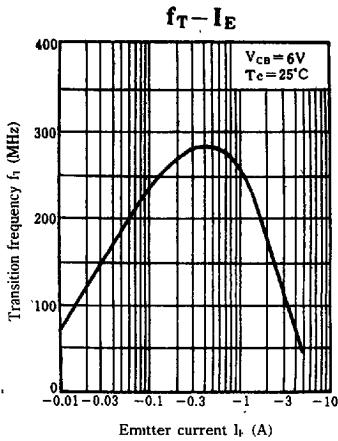
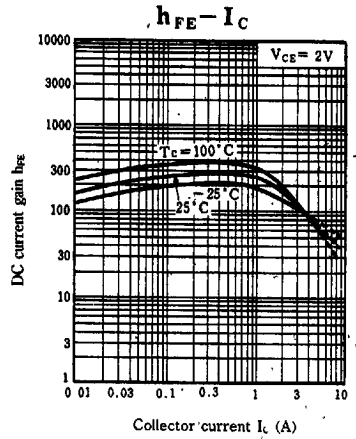
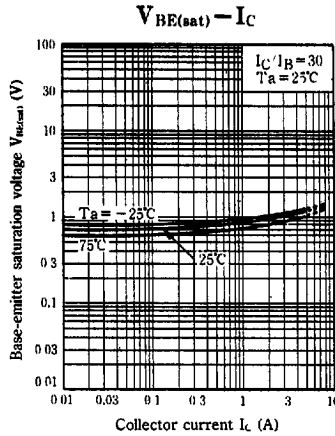
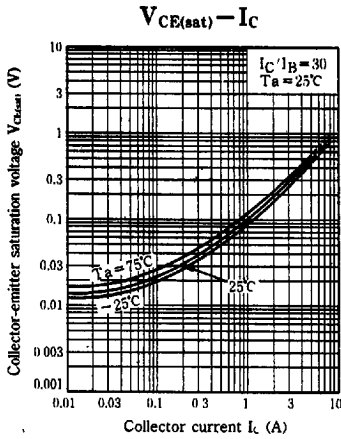
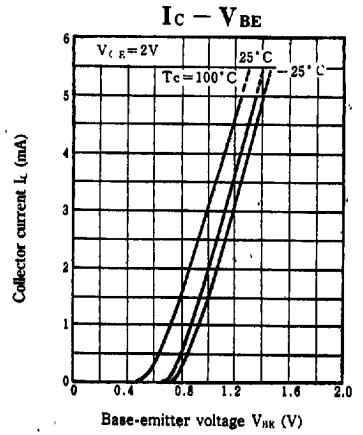
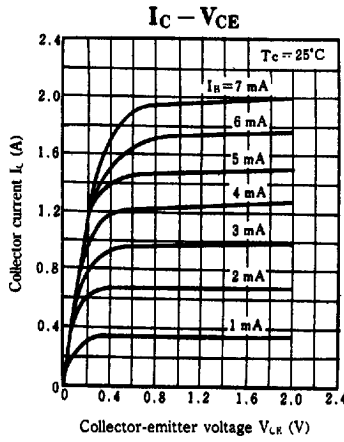
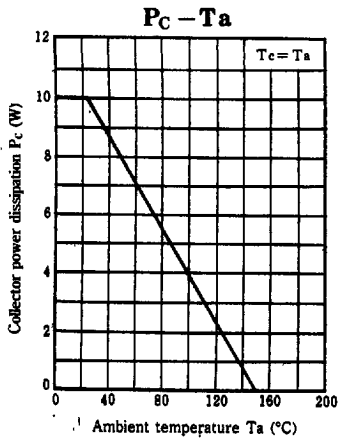
| Item | Symbol | Condition | min. | typ. | max. | Unit |
|--------------------------------------|---------------|--|------|------|------|---------------|
| Collector cutoff current | I_{CBO} | $V_{CB}=10\text{ V}, I_E=0$ | | | 0.1 | μA |
| Collector-emitter voltage | V_{CEO} | $I_C=1\text{ mA}, I_B=0$ | 20 | | | V |
| Collector-base voltage | V_{EBO} | $I_E=10\ \mu\text{A}, I_C=0$ | 7 | | | V |
| DC current gain | h_{FE1} | $V_{CE}=2\text{ V}, I_C=0.5\text{ A}^*$ | 140 | | 450 | |
| | h_{FE2} | $V_{CE}=2\text{ V}, I_C=1\text{ A}^*$ | 70 | | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=3\text{ A}, I_B=0.1\text{ A}^*$ | | | 1 | V |
| Transition frequency | f_T | $V_{CB}=6\text{ V}, I_E=-50\text{ mA}, f=200\text{ MHz}$ | | 150 | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB}=20\text{ V}, I_E=0, f=1\text{ MHz}$ | | | 50 | pF |

* Pulse measurement

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