

2SC2633

Silicon NPN Epitaxial Planar Type

AF High Voltage Amplifier

Complementary Pair with 2SA1125

■ Features

- Good linearity of DC current gain (h_{FE})
- High collector-emitter voltage (V_{CEO})
- Small collector output capacitance (C_{ob})

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

| Item | Symbol | Value | Unit |
|-----------------------------|-----------|------------|------------------|
| Collector-base voltage | V_{CBO} | 150 | V |
| Collector-emitter voltage | V_{CEO} | 150 | V |
| Emitter-base voltage | V_{EBO} | 5 | V |
| Peak collector current | I_{CP} | 100 | mA |
| Collector current | I_C | 50 | mA |
| Collector power dissipation | P_C | 1.5 | W |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 ~ +150 | $^\circ\text{C}$ |

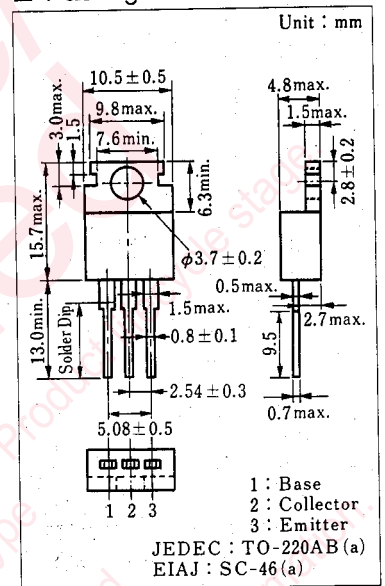
■ Electrical Characteristics ($T_c=25^\circ\text{C}$)

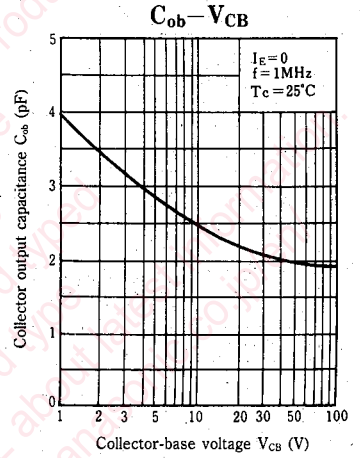
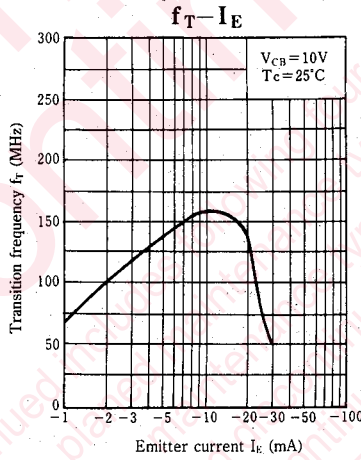
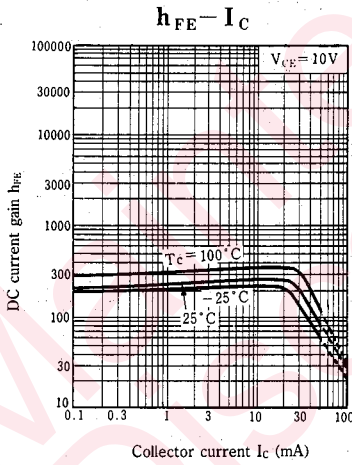
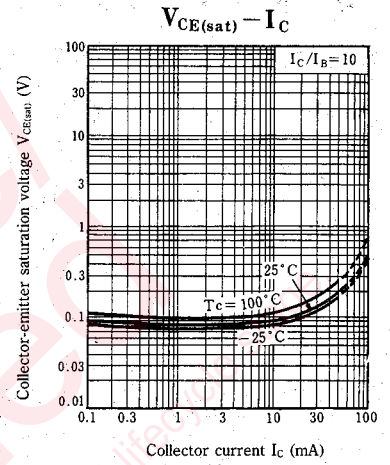
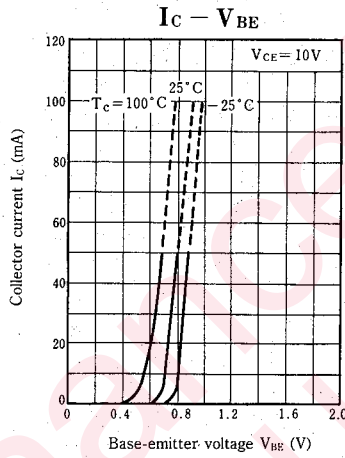
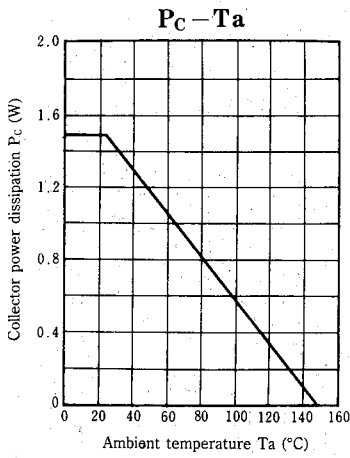
| Item | Symbol | Condition | min. | typ. | max. | Unit |
|--------------------------------------|---------------|---|------|------|------|---------------|
| Collector cutoff current | I_{CBO} | $V_{CB}=100\text{ V}, I_E=0$ | | | 1 | μA |
| Emitter cutoff current | I_{EBO} | $I_C=0.1\text{ mA}, I_B=0$ | 150 | | | V |
| Collector-base voltage | V_{EBO} | $I_E=10\ \mu\text{A}, I_C=0$ | 5 | | | V |
| DC current gain | h_{FE}^* | $V_{CE}=5\text{ V}, I_C=10\text{ mA}$ | 90 | | 450 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=30\text{ mA}, I_B=3\text{ mA}$ | | | 1 | V |
| Transition frequency | f_T | $V_{CB}=10\text{ V}, I_E=-10\text{ mA}, f=200\text{ MHz}$ | | 160 | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB}=10\text{ V}, I_E=0, f=1\text{ MHz}$ | | | 3 | pF |

* h_{FE} Classifications

| Class | Q | R | S | T |
|----------|--------|---------|---------|---------|
| h_{FE} | 90~155 | 130~220 | 185~330 | 260~450 |

■ Package Dimensions





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