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| SANYO | No.4668 | 2SA1723 |
| | | PNP Epitaxial Planar Silicon Transistor High-Frequency Amp, Medium-Power Amp Applications |

Applications

- Wideband amplifiers.
- High-frequency drivers.

Features

- High f_T ($f_T = 1.5\text{GHz typ}$).
- High current ($I_C = 300\text{mA}$).
- Adoption of FBET process.

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

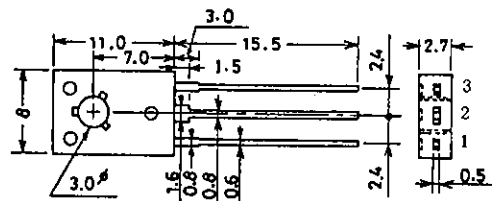
| | | | unit |
|------------------------------|-----------|-------------|------------------|
| Collector-to-Base Voltage | V_{CB0} | -30 | V |
| Collector-to-Emitter Voltage | V_{CEO} | -20 | V |
| Emitter-to-Base Voltage | V_{EBO} | -3 | V |
| Collector Current | I_C | -300 | mA |
| Collector Current(Pulse) | I_{CP} | -600 | mA |
| Collector Dissipation | P_C | 1.2 | W |
| | | 5 | W |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

$T_c = 25^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

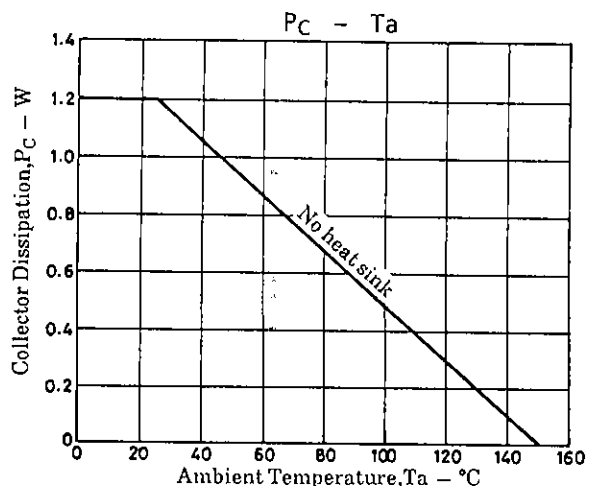
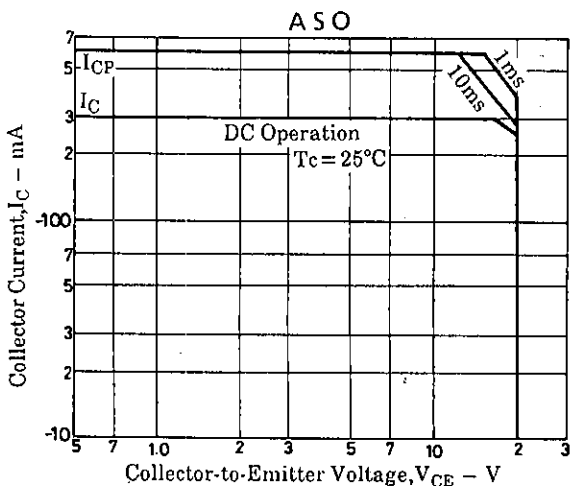
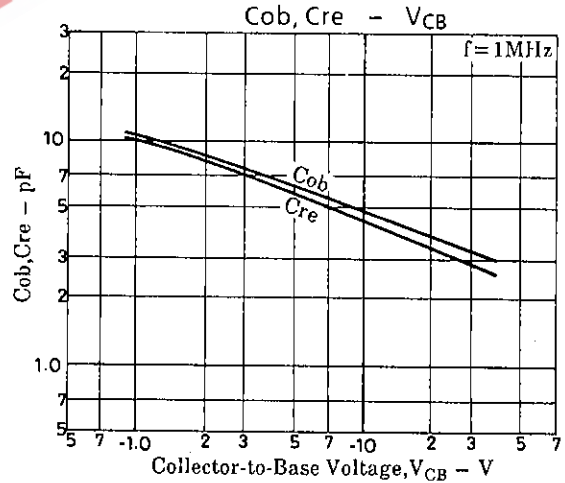
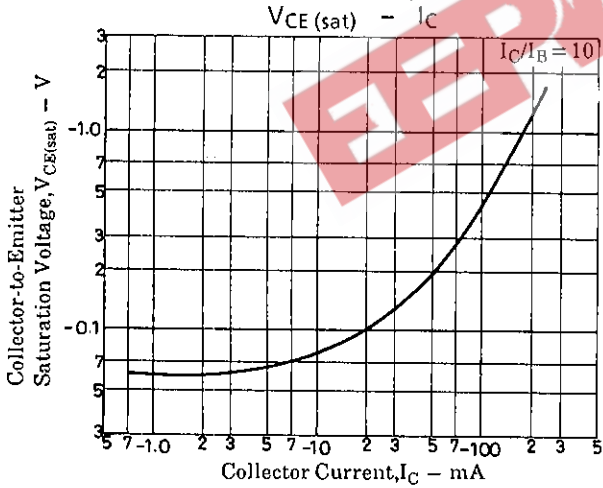
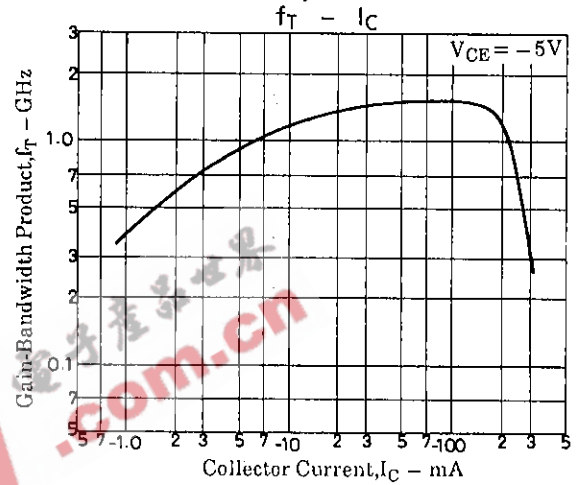
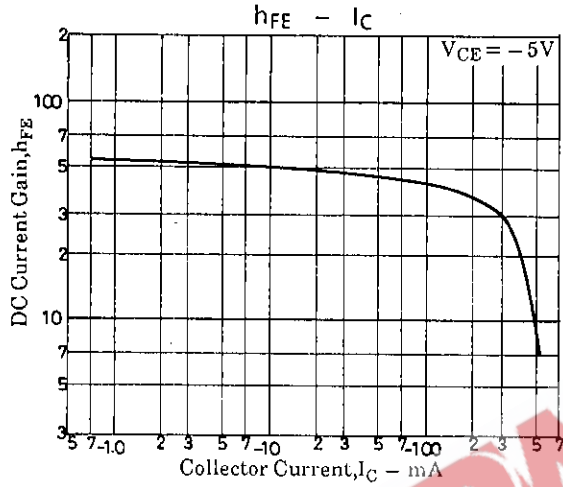
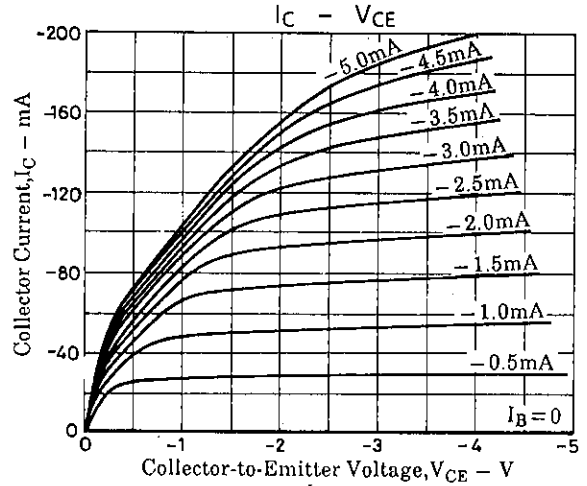
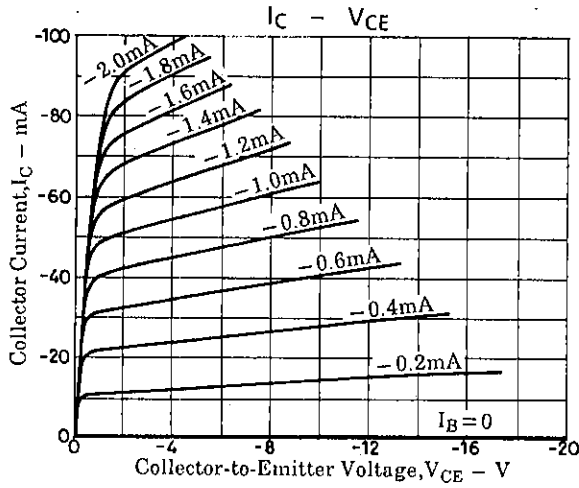
| | | | min | typ | max | unit |
|------------------------------|---------------|--|------|------|------|---------------|
| Collector Cutoff Current | I_{CBO} | $V_{CB} = -20\text{V}, I_E = 0$ | | | -0.1 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB} = -2\text{V}, I_C = 0$ | | | -1.0 | μA |
| DC Current Gain | $h_{FE(1)}$ | $V_{CE} = -5\text{V}, I_C = -50\text{mA}$ | 15 | | 100 | |
| | $h_{FE(2)}$ | $V_{CE} = -5\text{V}, I_C = -300\text{mA}$ | 5 | | | |
| Gain-Bandwidth Product | f_T | $V_{CE} = -5\text{V}, I_C = -100\text{mA}$ | | 1.5 | | GHz |
| Output Capacitance | C_{ob} | $V_{CB} = -10\text{V}, f = 1\text{MHz}$ | | 5.8 | | pF |
| Reverse Transfer Capacitance | C_{re} | $V_{CB} = -10\text{V}, f = 1\text{MHz}$ | | 5.0 | | pF |
| C-E Saturation Voltage | $V_{CE(sat)}$ | $I_C = -100\text{mA}, I_B = -10\text{mA}$ | -0.4 | -1.0 | | V |
| B-E Saturation Voltage | $V_{BE(sat)}$ | $I_C = -100\text{mA}, I_B = -10\text{mA}$ | -0.9 | -1.2 | | V |

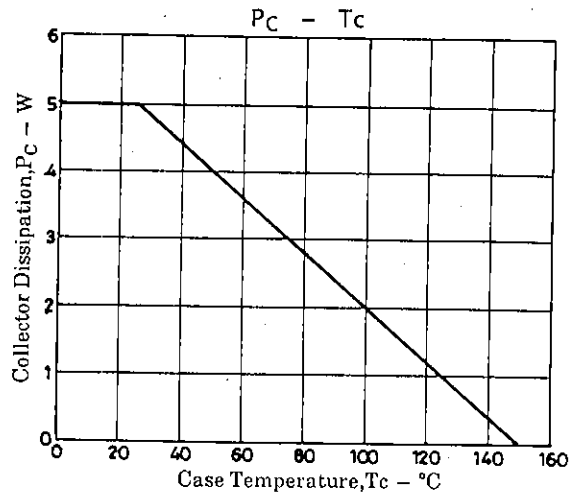
Package Dimensions 2009B
(unit : mm)



JEDEC: TO-126

- 1 : Emitter
- 2 : Collector
- 3 : Base





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