

SANYO

No.1858B

2SC3792

NPN Epitaxial Planar Silicon Transistor

High h_{FE} , Low-Frequency
General-Purpose Amp Applications**Applications**

- Low frequency general-purpose amplifiers, drivers, muting circuits

Features

- Adoption of FBET process
- High DC current gain
- High V_{EBO} ($V_{EBO} \geq 25V$)
- High reverse h_{FE} (150 typ.)
- Small ON resistance [$R_{on}=1\Omega$ ($I_B=5mA$)]

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

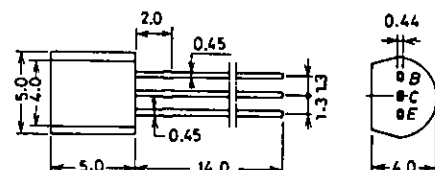
| | | | unit |
|------------------------------|-----------|-------------|------------|
| Collector to Base Voltage | V_{CBO} | 50 | V |
| Collector to Emitter Voltage | V_{CEO} | 20 | V |
| Emitter to Base Voltage | V_{EBO} | 25 | V |
| Collector Current | I_C | 500 | mA |
| Collector Current(Pulse) | I_{CP} | 800 | mA |
| Base Current | I_B | 100 | mA |
| Collector Dissipation | P_C | 500 | mW |
| Junction Temperature | T_J | 150 | $^\circ C$ |
| Storage Temperature | T_{stg} | -55 to +150 | $^\circ C$ |

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

| | | | min | typ | max | unit |
|---|---------------|--------------------------|------|-----|------|---------|
| Collector Cutoff Current | I_{CBO} | $V_{CB}=40V, I_E=0$ | | | 0.1 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB}=20V, I_C=0$ | | | 0.1 | μA |
| DC Current Gain | h_{FE} | $V_{CE}=5V, I_C=10mA$ | 300 | | 1200 | |
| Gain-Bandwidth Product | f_T | $V_{CE}=10V, I_C=10mA$ | | 250 | | MHz |
| Output Capacitance | c_{ob} | $V_{CB}=10V, f=1MHz$ | | 4.0 | | pF |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=100mA, I_B=2mA$ | 0.12 | 0.5 | | V |
| Base to Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C=100mA, I_E=2mA$ | 0.85 | 1.2 | | V |
| Collector to Base Breakdown Voltage | $V_{(BR)CBO}$ | $I_C=10\mu A, I_E=0$ | 50 | | | V |
| Collector to Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=1mA, R_{BE}=\infty$ | 20 | | | V |
| Emitter to Base Breakdown Voltage | $V_{(BR)EBO}$ | $I_E=10\mu A, I_C=0$ | 25 | | | V |

Package Dimensions 2003A

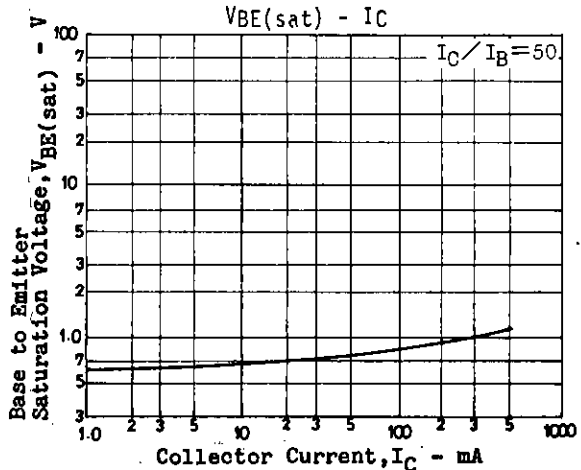
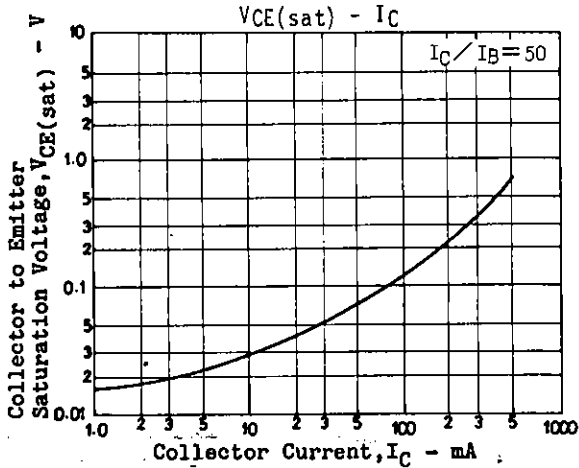
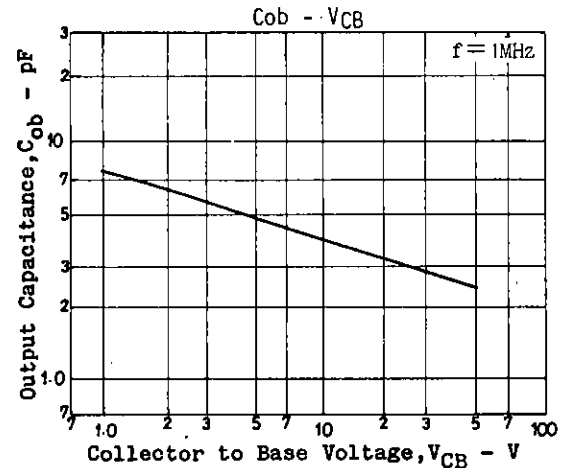
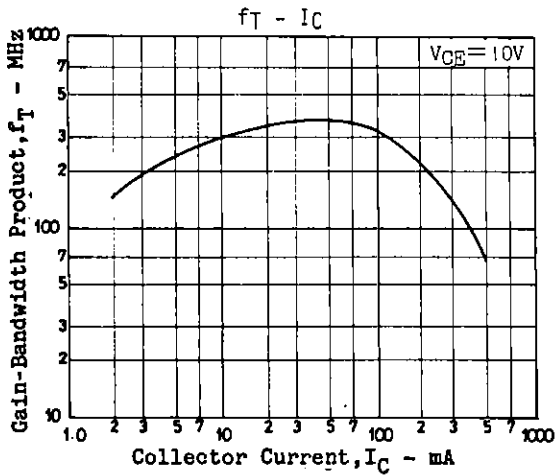
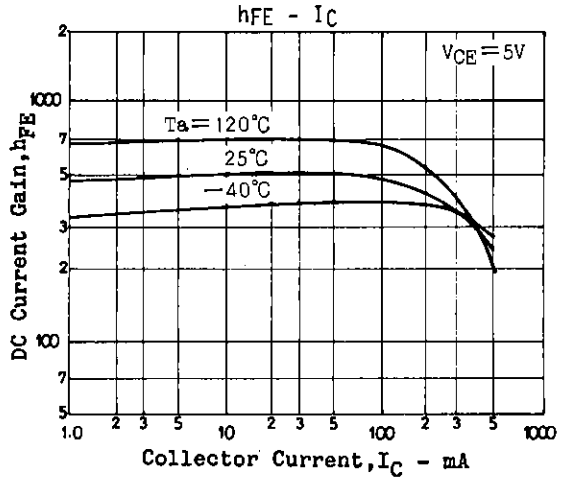
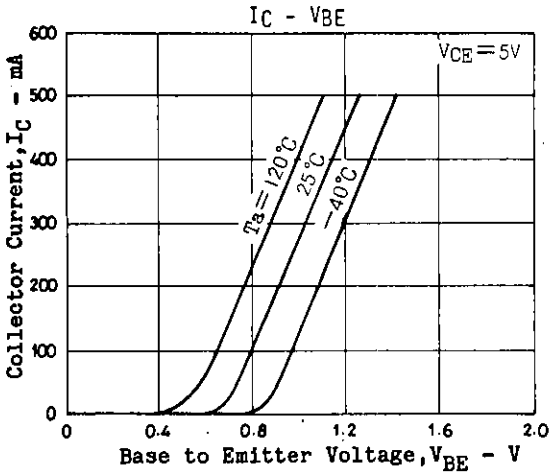
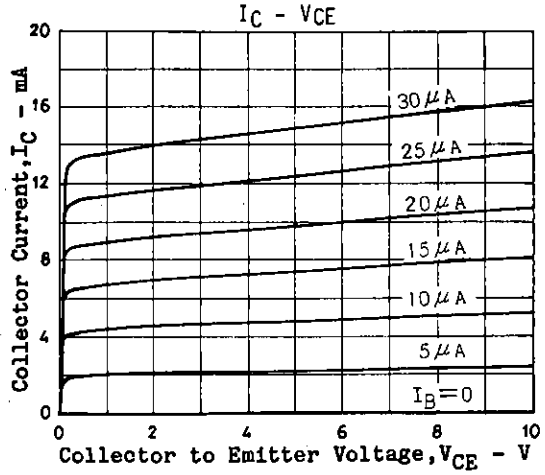
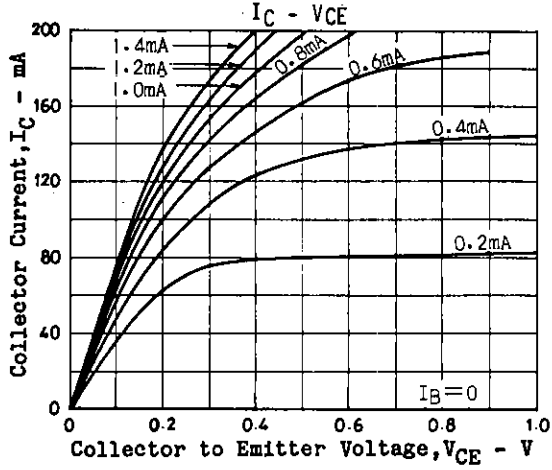
(unit: mm)

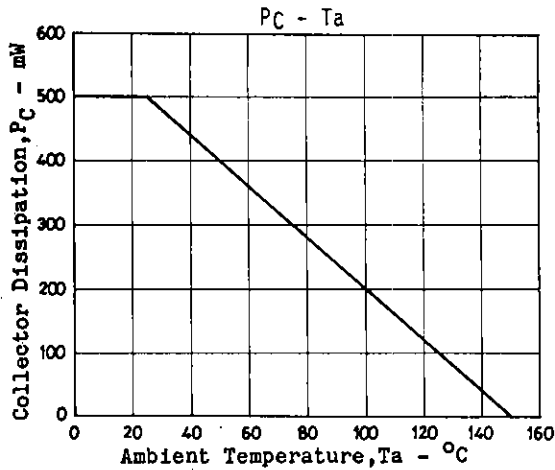
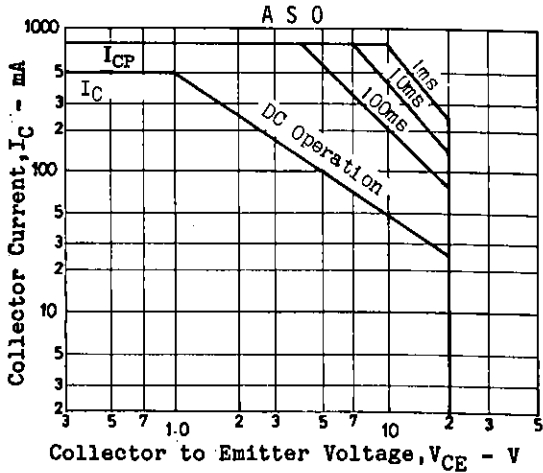
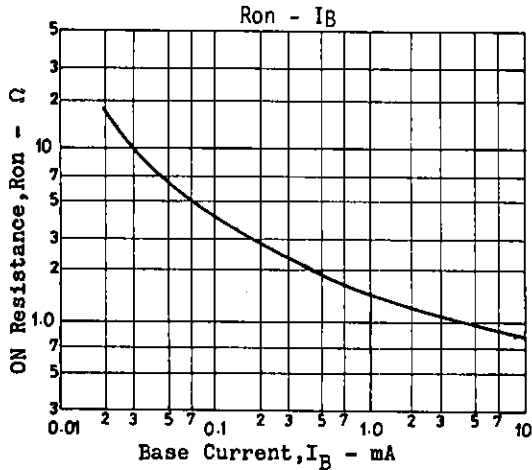


JEDEC: TO-92
EIAJ: SC-43
SANYO: NP

B. Base
C. Collector
E. Emitter

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