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| SANYO | No.4134 | 2SC4836 |
| | NPN Epitaxial Planar Silicon Transistor 20V/5A Switch Applications | |

Applications

- Strobes, power supplies, relay drivers, lamp drivers.

Features

- Large allowable collector dissipation.
- Low saturation voltage.
- Large current capacity.
- Fast switching speed.
- Usage of radial taping to meet automatic mounting.

Absolute Maximum Ratings at Ta = 25°C

| | | | unit |
|------------------------------|------------------|-------------|------|
| Collector-to-Base Voltage | V _{CB0} | 60 | V |
| Collector-to-Emitter Voltage | V _{CEO} | 20 | V |
| Emitter-to-Base Voltage | V _{EBO} | 6 | V |
| Collector Current | I _C | 5 | A |
| Peak Collector Current | i _{cp} | 8 | A |
| Collector Dissipation | P _C | 1.5 | W |
| Junction Temperature | T _j | 150 | °C |
| Storage Temperature | T _{stg} | -55 to +150 | °C |

Electrical Characteristics at Ta = 25°C

| | | | min | typ | max | unit |
|--------------------------|---------------------|--|------|-----|------|------|
| Collector Cutoff Current | I _{CB0} | V _{CB} = 50V, I _E = 0 | | | 100 | nA |
| Emitter Cutoff Current | I _{EBO} | V _{EB} = 5V, I _C = 0 | | | 100 | nA |
| DC Current Gain | h _{FE} (1) | V _{CE} = 2V, I _C = 500mA | 120※ | | 560※ | |
| | h _{FE} (2) | V _{CE} = 2V, I _C = 3A | 95 | | | |
| Gain Bandwidth Product | f _T | V _{CE} = 10V, I _C = 50mA | | 120 | | MHz |
| Output Capacitance | C _{ob} | V _{CB} = 10V, f = 1MHz | | 45 | | pF |

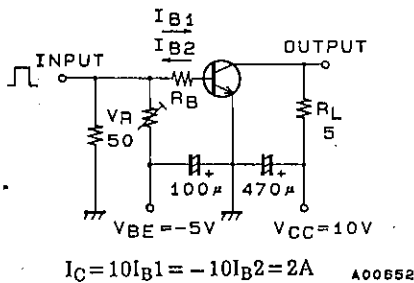
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※ : The 2SC4836 is classified by 500mA h_{FE} as follows :

| | | |
|-----------|-----------|-----------|
| 120 E 200 | 160 F 320 | 280 G 560 |
|-----------|-----------|-----------|

Switching Time Test Circuit

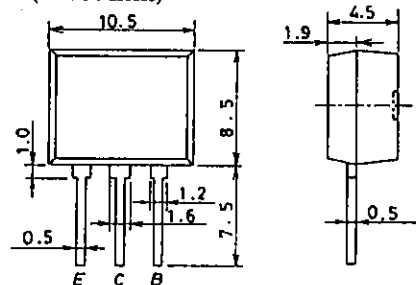
PW = 20μs
DC ≤ 1%



Unit (resistance : Ω, capacitance : F)

Package Dimensions 2084

(unit : mm)

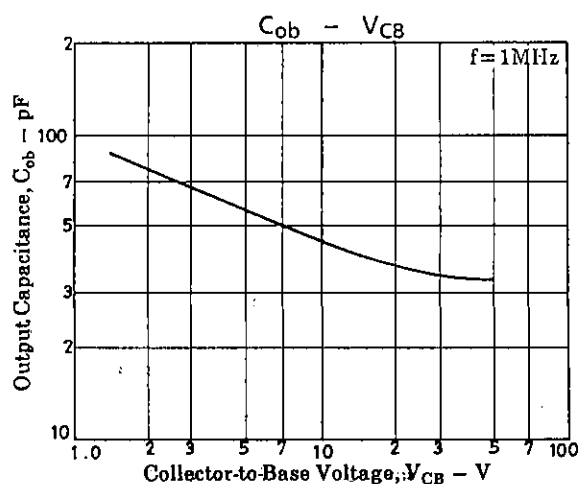
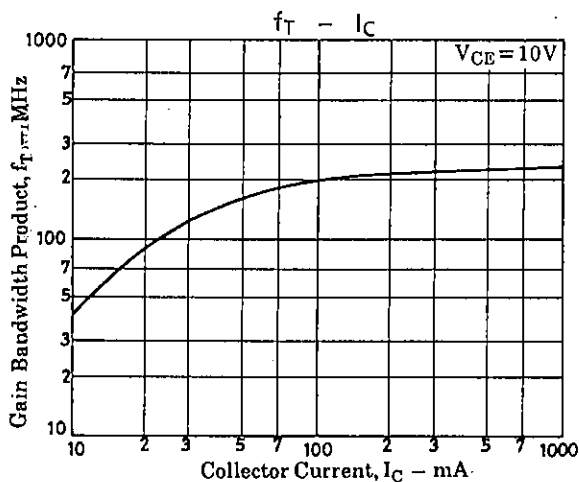
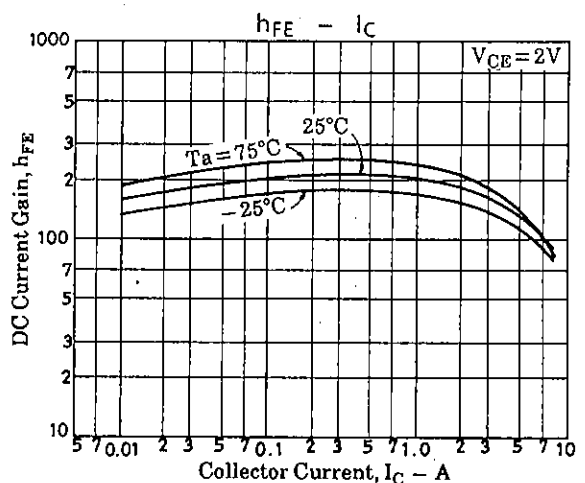
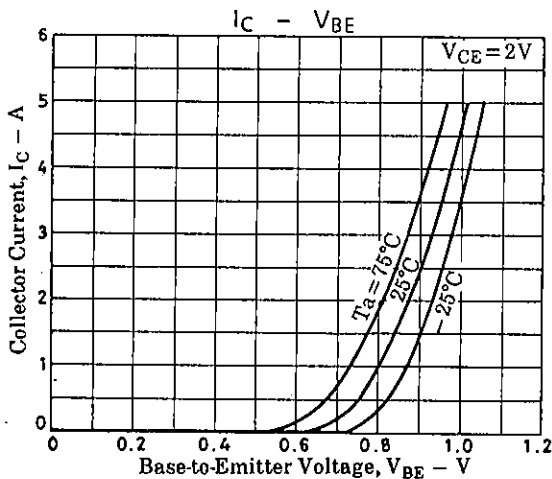
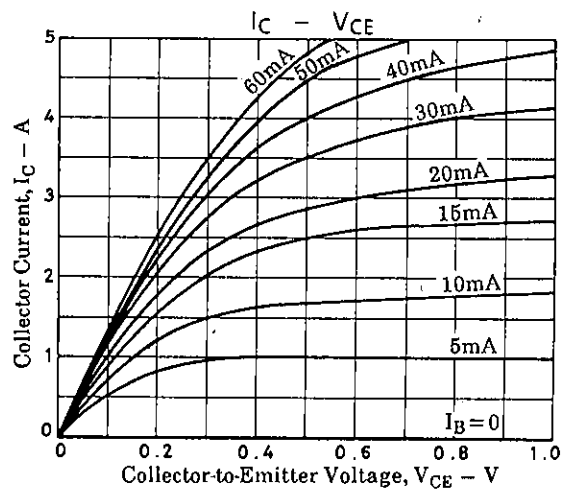
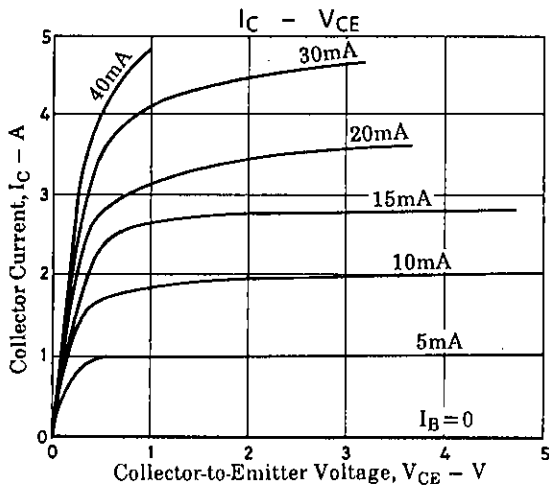


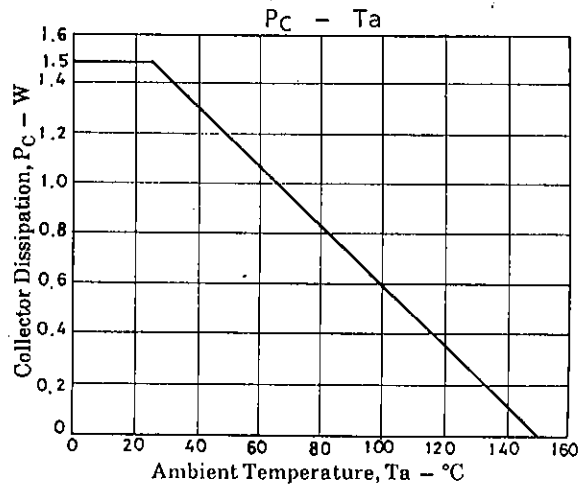
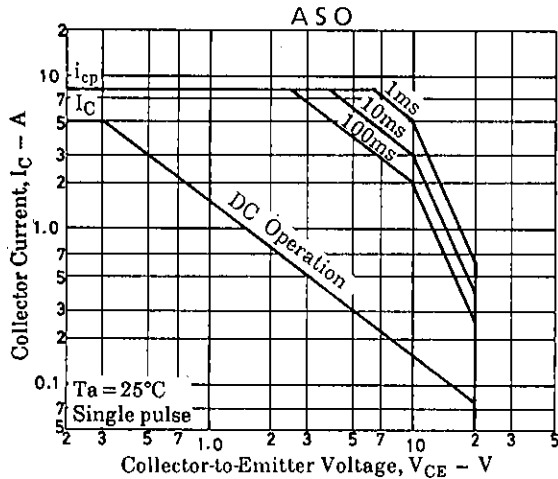
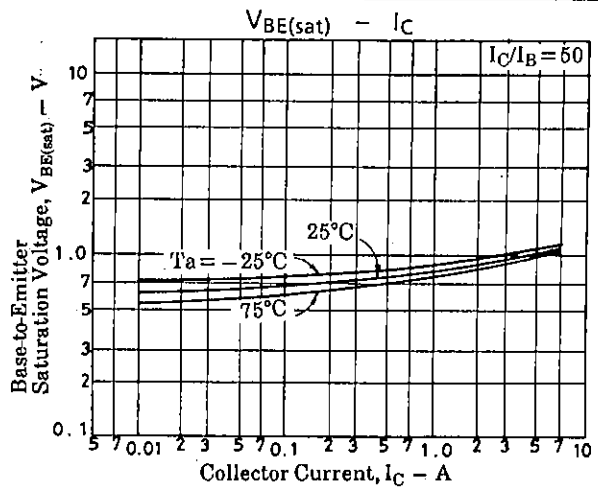
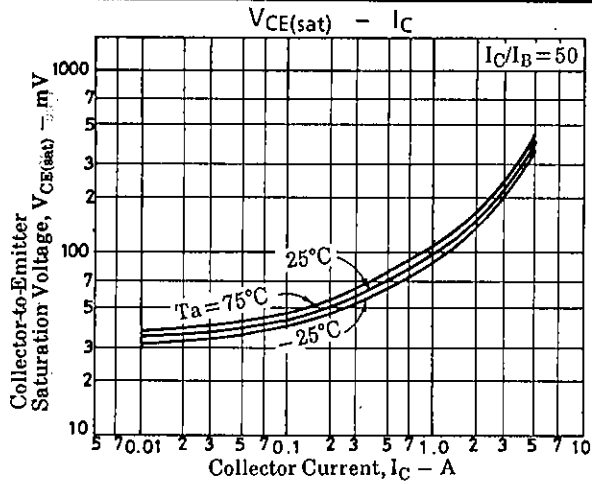
E : Emitter
C : Collector
B : Base

SANYO : FLP

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| | | | min | typ | max | unit |
|------------------------|---------------|------------------------------|-----|-----|-----|------|
| C-E Saturation Voltage | $V_{CE(sat)}$ | $I_C = 3A, I_B = 60mA$ | | 220 | 500 | mV |
| B-E Saturation Voltage | $V_{BE(sat)}$ | $I_C = 3A, I_B = 60mA$ | | | 1.5 | V |
| C-B Breakdown Voltage | $V_{(BR)CBO}$ | $I_C = 10\mu A, I_E = 0$ | 60 | | | V |
| C-E Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = 1mA, R_{BE} = \infty$ | 20 | | | V |
| E-B Breakdown Voltage | $V_{(BR)EBO}$ | $I_E = 10\mu A, I_C = 0$ | 6 | | | V |
| Turn ON Time | t_{on} | See specified Test Circuit. | | 30 | | ns |
| Storage Time | t_{stg} | " | | 300 | | ns |
| Fall Time | t_f | " | | 40 | | ns |





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