

**SANYO**

No.4692

2SC4660

NPN Epitaxial Planar Silicon Transistor

High-Definition CRT Display

Video Output Applications

Features

- High  $f_T$  ( $f_T=2.2\text{GHz typ.}$ ).
- 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 | $V_{CE0}$ | 20          | V                |
| Emitter-to-Base Voltage      | $V_{EB0}$ | 3           | V                |
| Collector Current            | $I_C$     | 300         | mA               |
| Collector Current (Pulse)    | $I_{CP}$  | 600         | mA               |
| Collector Dissipation        | $P_C$     | 1.3         | W                |
|                              |           | 5           | W                |
| Junction Temperature         | $T_j$     | 150         | $^\circ\text{C}$ |
| Storage Temperature          | $T_{stg}$ | -55 to +150 | $^\circ\text{C}$ |

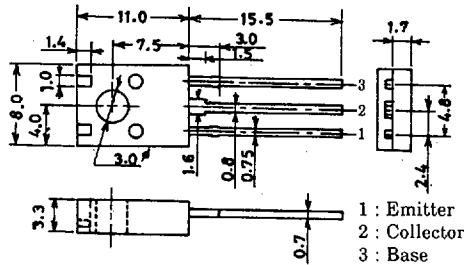
Electrical Characteristics at  $T_a=25^\circ\text{C}$

|                              |               |                                      | min | typ | max | unit          |
|------------------------------|---------------|--------------------------------------|-----|-----|-----|---------------|
| Collector Cutoff Current     | $I_{CBO}$     | $V_{CB}=20\text{V}, I_E=0$           |     |     | 0.1 | $\mu\text{A}$ |
| Emitter Cutoff Current       | $I_{EBO}$     | $V_{EB}=2\text{V}, I_C=0$            |     |     | 5.0 | $\mu\text{A}$ |
| DC Current Gain              | $h_{FE(1)}$   | $V_{CE}=5\text{V}, I_C=50\text{mA}$  | 40  |     | 200 |               |
|                              | $h_{FE(2)}$   | $V_{CE}=5\text{V}, I_C=300\text{mA}$ | 20  |     |     |               |
| Gain-Bandwidth Product       | $f_T$         | $V_{CE}=5\text{V}, I_C=50\text{mA}$  |     | 2.2 |     | GHz           |
| Output Capacitance           | $C_{ob}$      | $V_{CB}=10\text{V}, f=1\text{MHz}$   |     | 3.9 |     | pF            |
| Reverse Transfer Capacitance | $C_{re}$      | $V_{CB}=10\text{V}, f=1\text{MHz}$   |     | 3.2 |     | pF            |
| C-E Saturation Voltage       | $V_{CE(sat)}$ | $I_C=100\text{mA}, I_B=10\text{mA}$  | 0.2 | 0.6 |     | V             |
| B-E Saturation Voltage       | $V_{BE(sat)}$ | $I_C=100\text{mA}, I_B=10\text{mA}$  | 0.9 | 1.2 |     | V             |

※ : The 2SC4660 are classified by 50mA  $h_{FE}$  as follows:

|    |   |    |    |   |     |     |   |     |
|----|---|----|----|---|-----|-----|---|-----|
| 40 | C | 80 | 60 | D | 120 | 100 | E | 200 |
|----|---|----|----|---|-----|-----|---|-----|

Package Dimensions 2042B  
(unit : mm)



SANYO: TO126ML

