

# 2SC1360, 2SC1360A

Silicon NPN epitaxial planer type

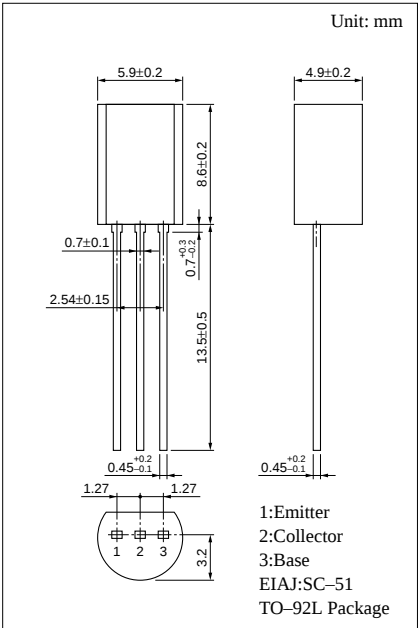
For intermediate frequency amplification of TV image

## ■ Features

- High transition frequency  $f_T$ .
- Large collector power dissipation  $P_C$ .

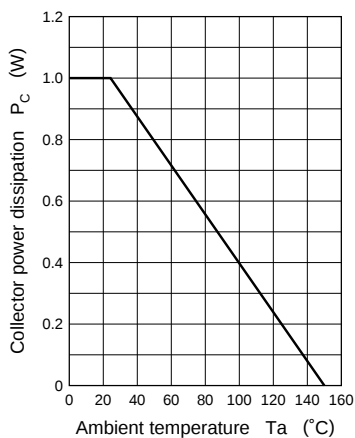
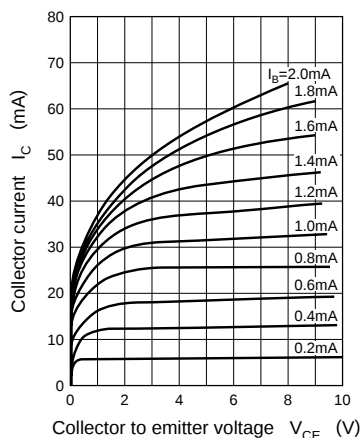
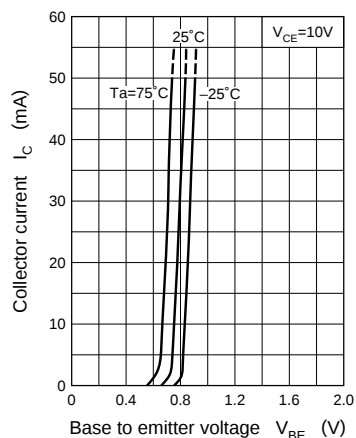
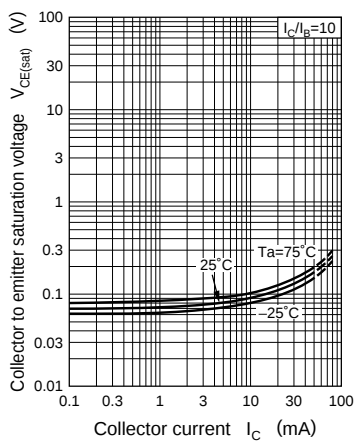
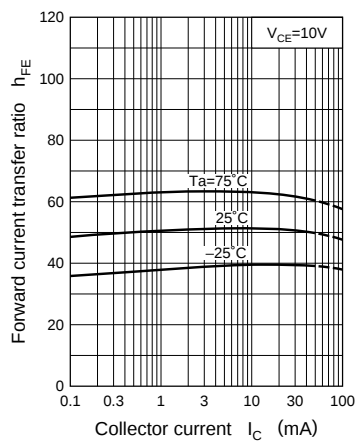
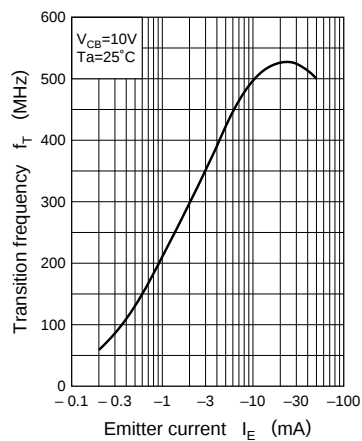
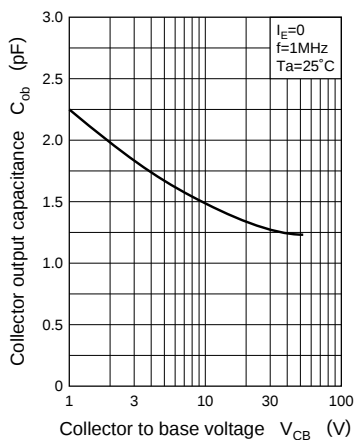
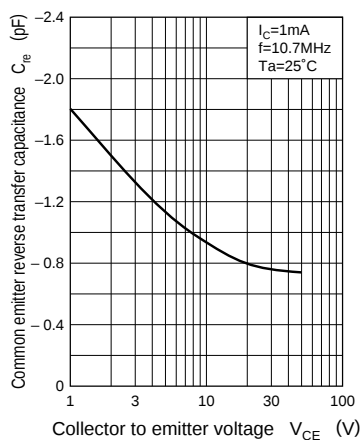
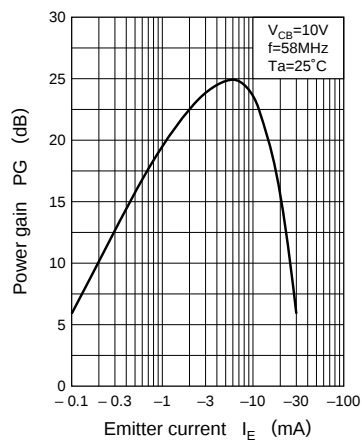
## ■ Absolute Maximum Ratings (Ta=25°C)

| Parameter                    | Symbol    | Ratings    | Unit |
|------------------------------|-----------|------------|------|
| Collector to base voltage    | $V_{CBO}$ | 50         | V    |
| 2SC1360A                     |           | 60         |      |
| Collector to emitter voltage | $V_{CEO}$ | 45         | V    |
| 2SC1360A                     |           | 60         |      |
| Emitter to base voltage      | $V_{EBO}$ | 4          | V    |
| Collector current            | $I_C$     | 50         | mA   |
| Collector power dissipation  | $P_C$     | 1          | W    |
| Junction temperature         | $T_j$     | 150        | °C   |
| Storage temperature          | $T_{stg}$ | -55 ~ +150 | °C   |



## ■ Electrical Characteristics (Ta=25°C)

| Parameter                                   | Symbol        | Conditions                              | min | typ | max | Unit |
|---------------------------------------------|---------------|-----------------------------------------|-----|-----|-----|------|
| Collector cutoff current                    | $I_{CBO}$     | $V_{CB} = 20V, I_E = 0$                 |     |     | 100 | nA   |
| Collector to base voltage                   | $V_{CBO}$     | $I_C = 100\mu A, I_E = 0$               | 50  |     |     | V    |
|                                             |               |                                         | 60  |     |     |      |
| Collector to emitter voltage                | $V_{CEO}$     | $I_C = 1mA, I_B = 0$                    | 45  |     |     | V    |
|                                             |               |                                         | 60  |     |     |      |
| Emitter to base voltage                     | $V_{EBO}$     | $I_E = 100\mu A, I_C = 0$               | 4   |     |     | V    |
| Forward current transfer ratio              | $h_{FE}$      | $V_{CB} = 10V, I_E = -10mA$             | 20  |     | 100 |      |
| Collector to emitter saturation voltage     | $V_{CE(sat)}$ | $I_C = 20mA, I_B = 2mA$                 |     |     | 0.4 | V    |
| Transition frequency                        | $f_T$         | $V_{CB} = 10V, I_E = -10mA, f = 100MHz$ | 300 |     |     | MHz  |
| Common emitter reverse transfer capacitance | $C_{re}$      | $V_{CE} = 10V, I_C = 1mA, f = 10.7MHz$  |     |     | 1.5 | pF   |
| Power gain                                  | PG            | $V_{CB} = 10V, I_E = -10mA, f = 58MHz$  | 22  |     | 30  | dB   |

$P_C - T_a$  $I_C - V_{CE}$  $I_C - V_{BE}$  $V_{CE(sat)} - I_C$  $h_{FE} - I_C$  $f_T - I_E$  $C_{ob} - V_{CB}$  $C_{re} - V_{CE}$  $PG - I_E$ 

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