

# 2SC2611

Silicon NPN Triple Diffused

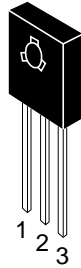
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## Application

High voltage amplifier TV VIDEO output

## Outline

TO-126 MOD



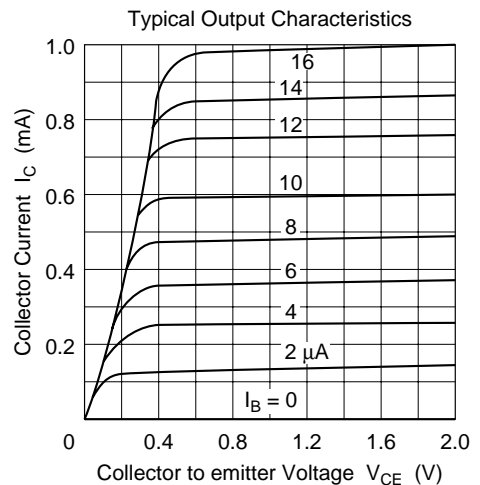
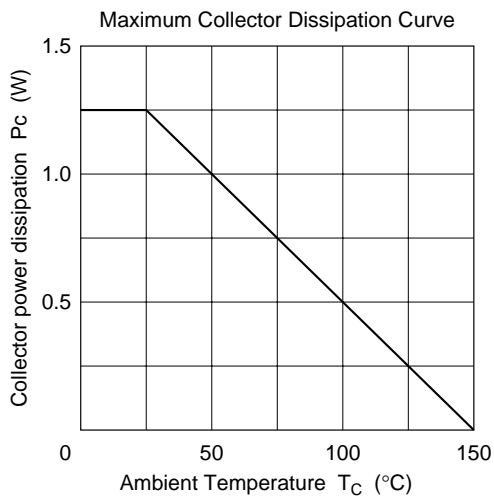
1. Emitter  
2. Collector  
3. Base

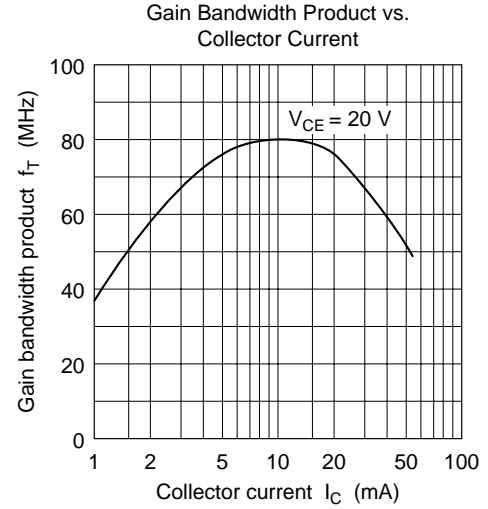
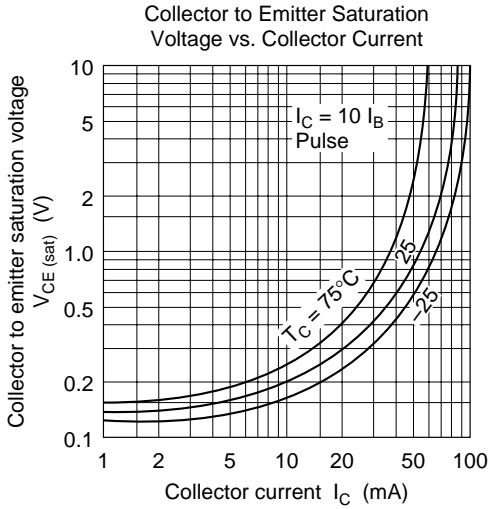
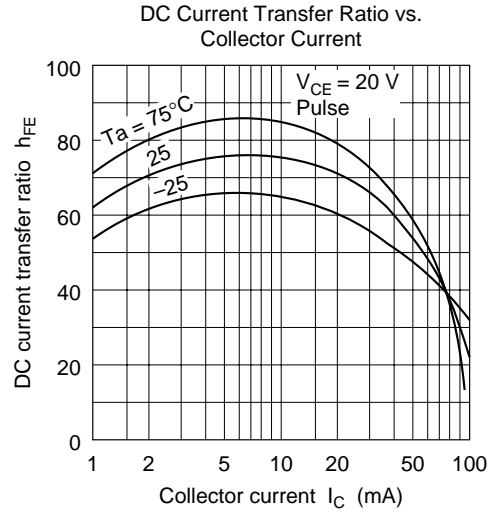
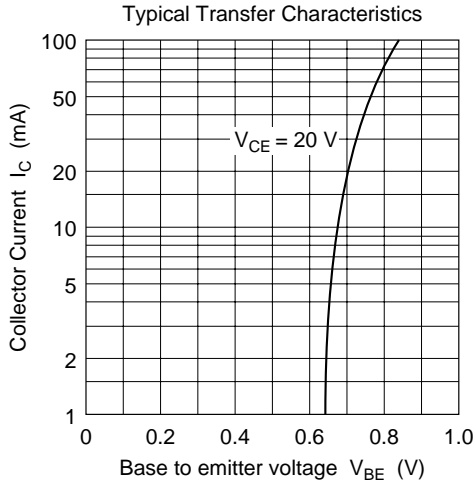
## Absolute Maximum Ratings (Ta = 25°C)

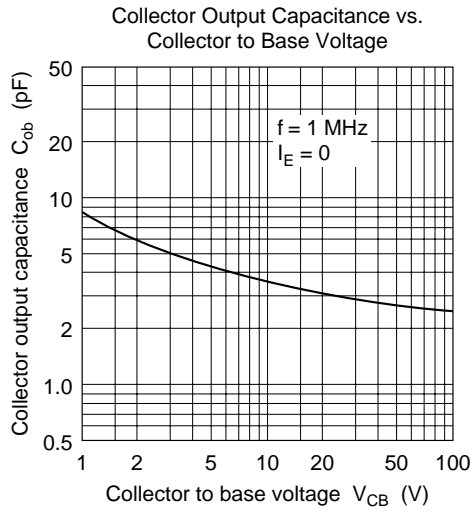
| Item                         | Symbol    | Ratings     | Unit |
|------------------------------|-----------|-------------|------|
| Collector to base voltage    | $V_{CBO}$ | 300         | V    |
| Collector to emitter voltage | $V_{CEO}$ | 300         | V    |
| Emitter to base voltage      | $V_{EBO}$ | 5           | V    |
| Collector current            | $I_C$     | 100         | mA   |
| Collector power dissipation  | $P_C$     | 1.25        | W    |
| Junction temperature         | $T_j$     | 150         | °C   |
| Storage temperature          | $T_{stg}$ | -55 to +150 | °C   |

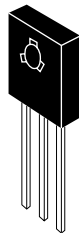
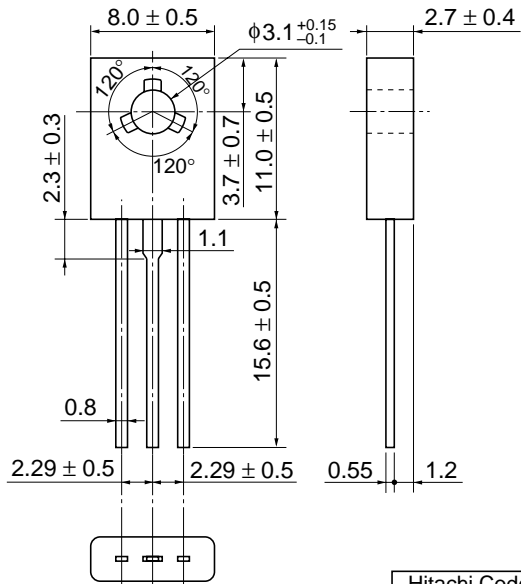
## Electrical Characteristics (Ta = 25°C)

| Item                                    | Symbol        | Min | Typ | Max | Unit    | Test conditions                                     |
|---|---------------|-----|-----|-----|---------|---|
| Collector to base breakdown voltage     | $V_{(BR)CBO}$ | 300 | —   | —   | V       | $I_C = 10 \mu A, I_E = 0$                           |
| Collector to emitter breakdown voltage  | $V_{(BR)CEO}$ | 300 | —   | —   | V       | $I_C = 1 \text{ mA}, R_{BE} = \infty$               |
| Emitter to base breakdown voltage       | $V_{(BR)EBO}$ | 5   | —   | —   | V       | $I_E = 10 \mu A, I_C = 0$                           |
| Collector cutoff current                | $I_{CEO}$     | —   | —   | 1.0 | $\mu A$ | $V_{CE} = 250 \text{ V}, R_{BE} = \infty$           |
| DC current transfer ratio               | $h_{FE}$      | 30  | —   | 200 |         | $V_{CE} = 20 \text{ V}, I_C = 20 \text{ mA}$        |
| Collector to emitter saturation voltage | $V_{CE(sat)}$ | —   | —   | 1.5 | V       | $I_C = 20 \text{ mA}, I_B = 2 \text{ mA}$           |
| Gain bandwidth product                  | $f_T$         | 50  | 80  | —   | MHz     | $V_{CE} = 20 \text{ V}, I_C = 20 \text{ mA}$        |
| Collector output capacitance            | Cob           | —   | —   | 4.0 | pF      | $V_{CB} = 20 \text{ V}, I_E = 0, f = 1 \text{ MHz}$ |









|                          |            |
|--------------------------|------------|
| Hitachi Code             | TO-126 Mod |
| JEDEC                    | —          |
| EIAJ                     | —          |
| Weight (reference value) | 0.67 g     |

## Cautions

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