

2SC4217 — NPN Triple Diffused Planar Silicon Transistor

Color TV Chroma Output and Audio Output Applications

Features

- High breakdown voltage ($V_{CEO} \geq 300V$).
- Micaless package facilitating easy mounting.

Specifications

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

| Parameter | Symbol | Conditions | Ratings | Unit |
|------------------------------|-----------|--------------------|-------------|------------|
| Collector-to-Base Voltage | V_{CBO} | | 300 | V |
| Collector-to-Emitter Voltage | V_{CEO} | | 300 | V |
| Emitter-to-Base Voltage | V_{EBO} | | 6 | V |
| Collector Current | I_C | | 200 | mA |
| Collector Current (Pulse) | I_{CP} | | 400 | mA |
| Collector Dissipation | P_C | | 1.5 | W |
| | | $T_c = 25^\circ C$ | 10 | W |
| Junction Temperature | T_J | | 150 | $^\circ C$ |
| Storage Temperature | T_{stg} | | -55 to +150 | $^\circ C$ |

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

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|--------------------------|-----------|----------------------------|---------|-----|------|---------|
| | | | min | typ | max | |
| Collector Cutoff Current | I_{CBO} | $V_{CB} = 200V, I_E = 0A$ | | | 0.1 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB} = 5V, I_C = 0A$ | | | 0.1 | μA |
| DC Current Gain | h_{FE} | $V_{CE} = 10V, I_C = 10mA$ | 40* | | 200* | |

Continued on next page.

* : The 2SC4217 is classified by 10mA h_{FE} as follows:

| Rank | C | D | E |
|----------|----------|-----------|------------|
| h_{FE} | 40 to 80 | 60 to 120 | 100 to 200 |

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2SC4217

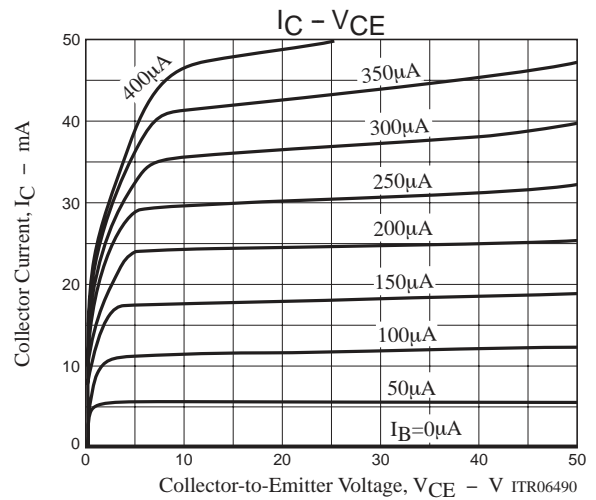
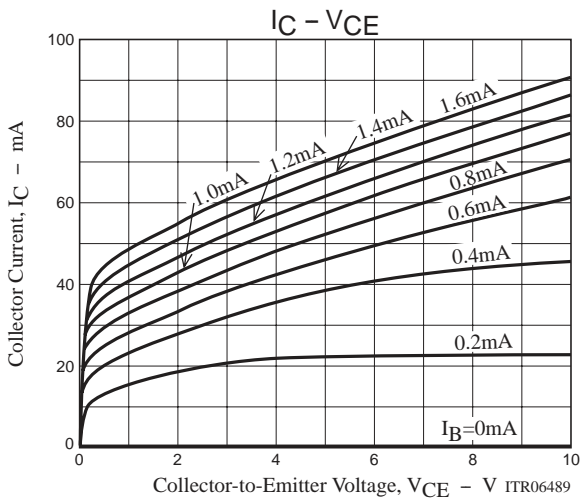
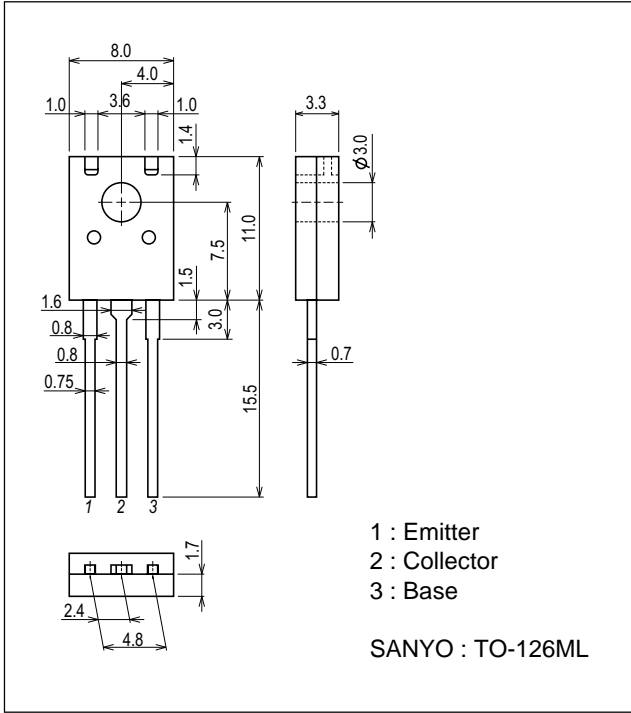
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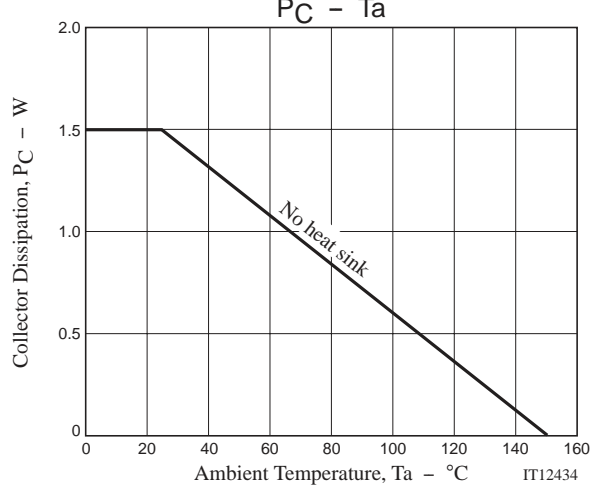
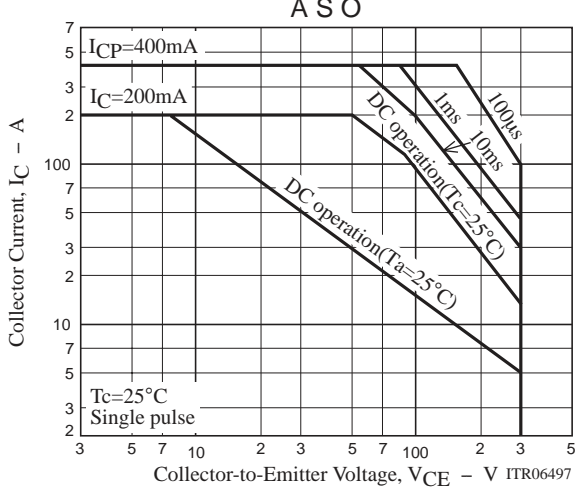
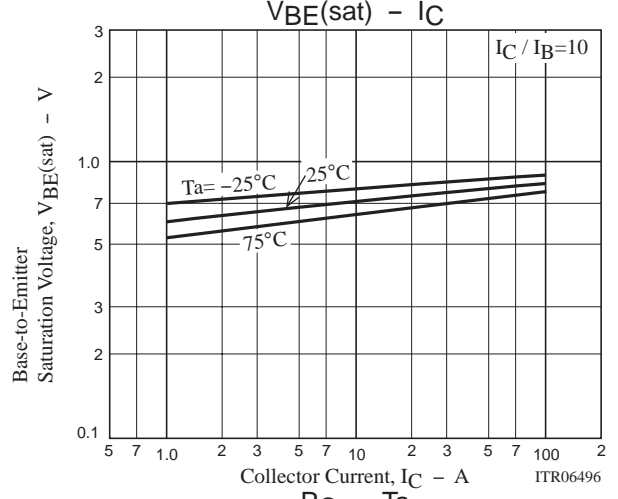
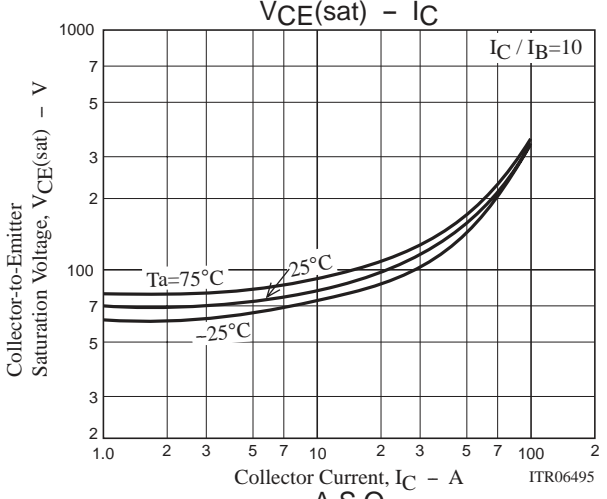
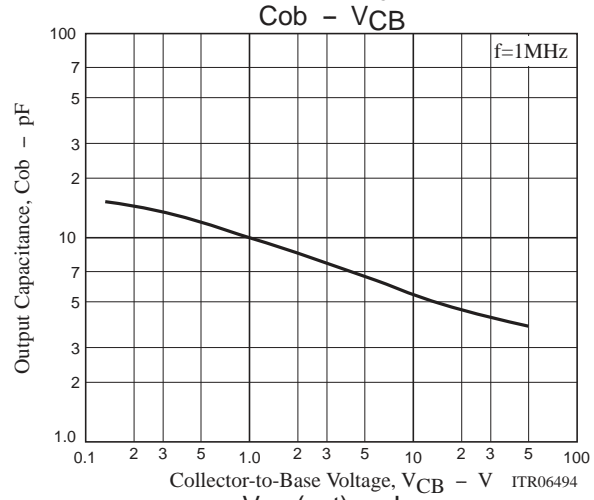
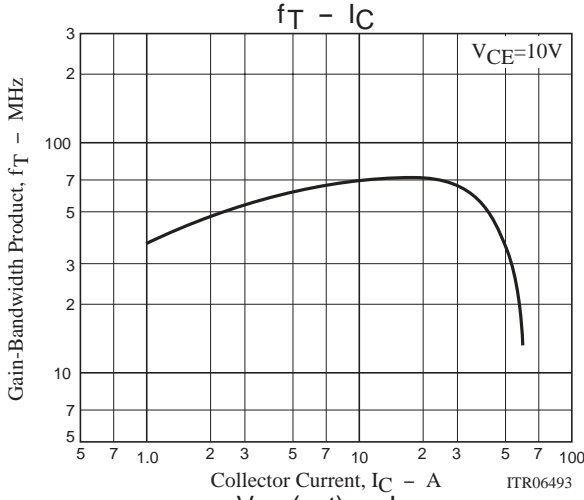
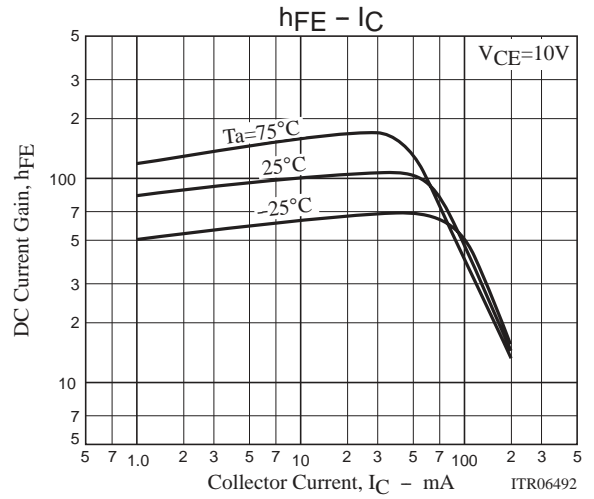
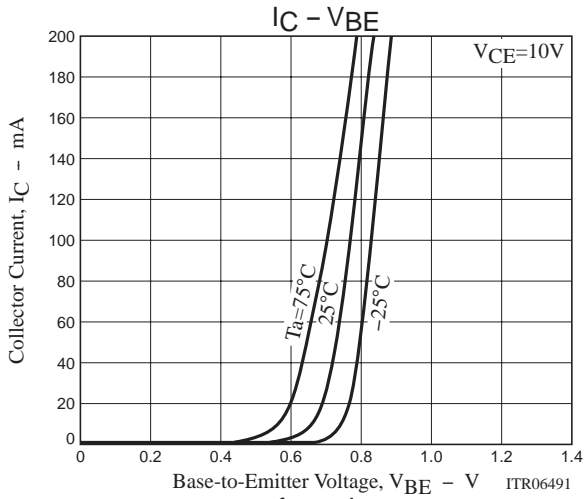
| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---|---------------|------------------------|---------|-----|-----|------|
| | | | min | typ | max | |
| Gain-Bandwidth Product | f_T | $V_{CE}=10V, I_C=10mA$ | | 70 | | MHz |
| Output Capacitance | C_{ob} | $V_{CB}=50V, f=1MHz$ | | 3.5 | | pF |
| Collector-to-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=20mA, I_B=2mA$ | | | 0.6 | V |
| Base-to-Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C=20mA, I_B=2mA$ | | | 1.0 | V |

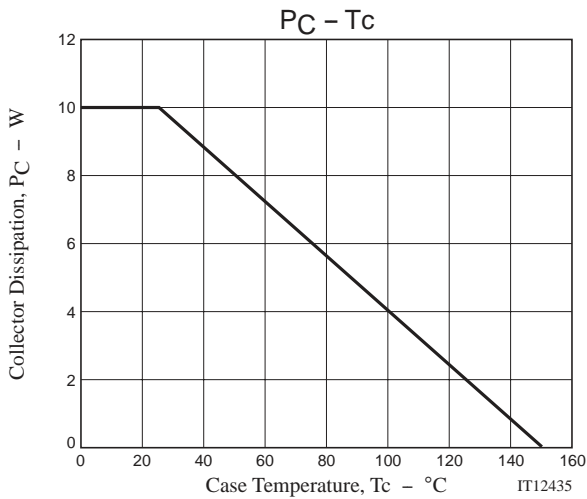
Package Dimensions

unit : mm (typ)

7516-002







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