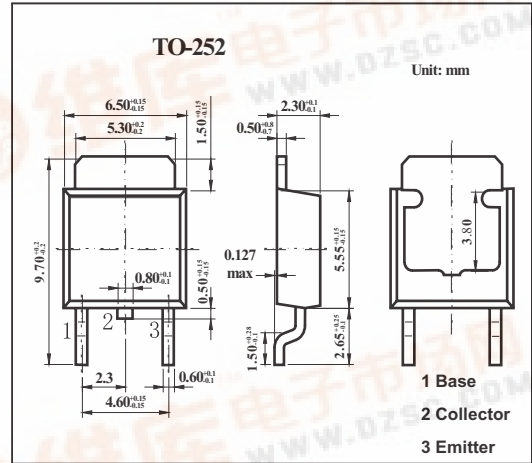


SMD Type Transistors

High-Voltage Switching Applications
2SC4134

■ Features

- High breakdown voltage and large current capacity.
- Fast switching speed.

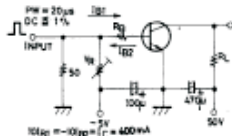


■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|--|------------------|-------------|------|
| Collector-base voltage | V _{CB0} | -120 | V |
| Collector-emitter voltage | V _{CE0} | -100 | V |
| Emitter-base voltage | V _{EB0} | -6 | V |
| Collector current | I _C | -1 | A |
| Collector current (pulse) | I _{CP} | -2 | A |
| Collector dissipation | P _C | 0.8 | W |
| Collector dissipation T _c =25°C | P _C | 10 | W |
| Junction temperature | T _j | 150 | °C |
| Storage temperature | T _{stg} | -55 to +150 | °C |

2SC4134

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit | |
|--------------------------------------|----------------------|--|-----|------|-----|------|----|
| Collector cutoff current | I _{CBO} | V _{CB} = 100V, I _E = 0 | | | 100 | nA | |
| Emitter cutoff current | I _{EBO} | V _{EB} = 4V, I _C = 0 | | | 100 | nA | |
| DC current gain | h _{FE} | V _{CE} = 5V, I _C = 100mA | 100 | | 400 | | |
| Gain bandwidth product | f _T | V _{CE} = 10V, I _C = 100mA | | 120 | | MHz | |
| Output capacitance | C _{ob} | V _{CB} = 10V, f = 1.0MHz | | 8.5 | | pF | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C = 400mA, I _B = 40mA | | 0.1 | 0.4 | V | |
| Base-emitter saturation voltage | V _{BE(sat)} | I _C = 400mA, I _B = 40mA | | 0.85 | 1.2 | V | |
| Collector-base breakdown voltage | V _{(BR)CBO} | I _C = 10μA, I _E = 0 | 120 | | | V | |
| Collector-emitter breakdown voltage | V _{(BR)CEO} | I _C = 1mA, R _{BE} = ∞ | 100 | | | V | |
| Emitter-base breakdown voltage | V _{(BR)EBO} | I _E = 10μA, I _C = 0 | 6 | | | V | |
| Turn-on time | t _{on} |  <p>Unit (resistance : Ω, capacitance : F) (For PNP, the polarity is reversed.)</p> | | 80 | | ns | |
| Storage time | t _{stg} | | | | 850 | | ns |
| Fall time | t _f | | | | 50 | | ns |

■ hFE Classification

| Rank | R | S | T |
|------|---------|---------|---------|
| hFE | 100~200 | 140~280 | 200~400 |