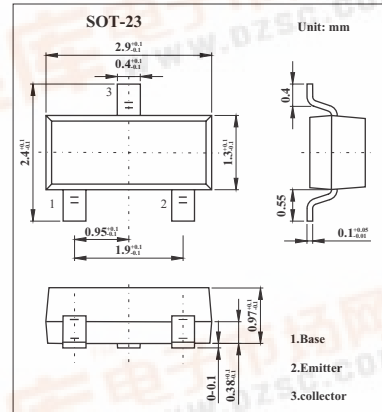


SMD Type Transistors

NPN Epitaxial Planar Silicon Transistors
2SC3361

■ Features

- Fast switching speed.
- High breakdown voltage.



■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|---------------------------|------------------|-------------|------|
| Collector-base voltage | V _{CB0} | 60 | V |
| Collector-emitter voltage | V _{CE0} | 50 | V |
| Emitter-base voltage | V _{EB0} | 5 | V |
| Collector current | I _C | 150 | mA |
| Collector current (pulse) | I _{CP} | 400 | mA |
| Base current | I _B | 40 | mA |
| Collector dissipation | P _C | 150 | mW |
| Junction temperature | T _j | 125 | °C |
| Storage temperature | T _{stg} | -55 to +125 | °C |

2SC3361

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|---|----------------------|--|-----|------|-----|------|
| Collector cutoff current | IcBO | V _{CB} = 40V , I _E = 0 | | | 0.1 | μA |
| Emitter cutoff current | I _{EBO} | V _{EB} = 4V , I _C = 0 | | | 0.1 | μA |
| DC current Gain | h _{FE} | V _{CE} = 6V , I _C = 1mA | 90 | | 400 | |
| Gain bandwidth product | f _T | V _{CE} = 6V , I _C = 1mA | | 100 | | MHz |
| Common base output capacitance | C _{ob} | V _{CB} = 6V , f = 1MHz | | 2.7 | | pF |
| Collector-to-emitter saturation voltage | V _{CE(sat)} | I _C = 10mA , I _B = 1mA | | 0.1 | 0.4 | V |
| Base-to-emitter saturation voltage | V _{BE(sat)} | I _C = 10mA , I _B = 1mA | | 0.75 | 1.1 | V |
| Collector-to-base breakdown voltage | V _{(BR)CBO} | I _C = 10μA , I _E = 0 | 60 | | | V |
| Collector-to-emitter breakdown voltage | V _{(BR)CEO} | I _C = 1mA , R _{BE} = ∞ | 50 | | | V |
| Emitter-to-base breakdown voltage | V _{(BR)EBO} | I _E = 10μA , I _C = 0 | 5 | | | V |
| Delay time | t _d | | 40 | | ns | |
| Rise time | t _r | | 80 | | ns | |
| Storage time | t _{stg} | | 230 | | ns | |
| Fall time | t _f | | 160 | | ns | |

■ hFE Classification

| Marking | S4 | S5 | S6 |
|---------|--------|---------|---------|
| hFE | 90~180 | 135~270 | 200~400 |