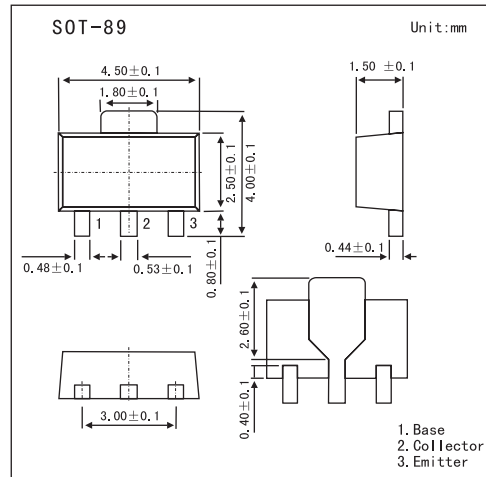


■ Features

- Low saturation voltage.
- High hFE.
- Large current capacity.
- Very small size making it easy to provide highdensity, small-sized hybrid ICs.

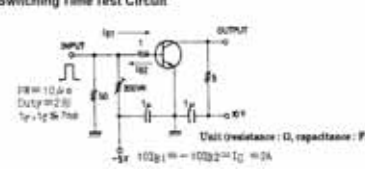


■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|---------------------------|------------------|-------------|------|
| Collector-base voltage | V _{CB0} | 60 | V |
| Collector-emitter voltage | V _{CE0} | 20 | V |
| Emitter-base voltage | V _{EB0} | 6 | V |
| Collector current | I _C | 5 | A |
| Collector current (pulse) | I _{CP} | 8 | A |
| Collector dissipation | P _C | 500 | mW |
| | P _C * | 1.5 | W |
| Junction temperature | T _J | 150 | °C |
| Storage temperature | T _{stg} | -55 to +150 | °C |

* Mounted on ceramic board(250mm2X0.8mm)

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit | |
|--------------------------------------|----------------------|--|-----|-----|-----|------|----|
| Collector cutoff current | ICBO | V _{CB} = 50 V, I _E =0 | | | 100 | nA | |
| Emitter cutoff current | IEBO | V _{EB} = 5 V, I _C =0 | | | 100 | nA | |
| DC current gain | hFE | V _{CE} = 2 V, I _C = 0.5 A | 120 | | 560 | | |
| Gain bandwidth product | f _T | V _{CE} = 10 V, I _C = 50 mA | | 120 | | MHz | |
| Output capacitance | C _{ob} | V _{CB} = 10 V, f = 1.0MHz | | 45 | | pF | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C = 3 A, I _B = 60 mA | | | 500 | mV | |
| Base-emitter saturation voltage | V _{BE(sat)} | I _C = 3 A, I _B = 60 mA | | | 1.5 | V | |
| Collector-base breakdown voltage | V _{(BR)CBO} | I _C = 10μA, I _E = 0 | 60 | | | V | |
| Collector-emitter breakdown voltage | V _{(BR)CEO} | I _C = 1mA, R _{BE} = ∞ | 20 | | | V | |
| Emitter-base breakdown voltage | V _{(BR)EBO} | I _E = 10μA, I _C = 0 | 6 | | | V | |
| Turn-on time | ton | <p>Switching Time Test Circuit</p>  <p>Unit (resistance: Ω, capacitance: F)</p> | | 30 | | ns | |
| Storage time | tstg | | | | 300 | | ns |
| Turn-off time | tf | | | | 40 | | ns |

■ hFE Classification

| Marking | DK | | |
|---------|---------|---------|---------|
| | E | F | G |
| hFE | 120~200 | 160~320 | 280~560 |