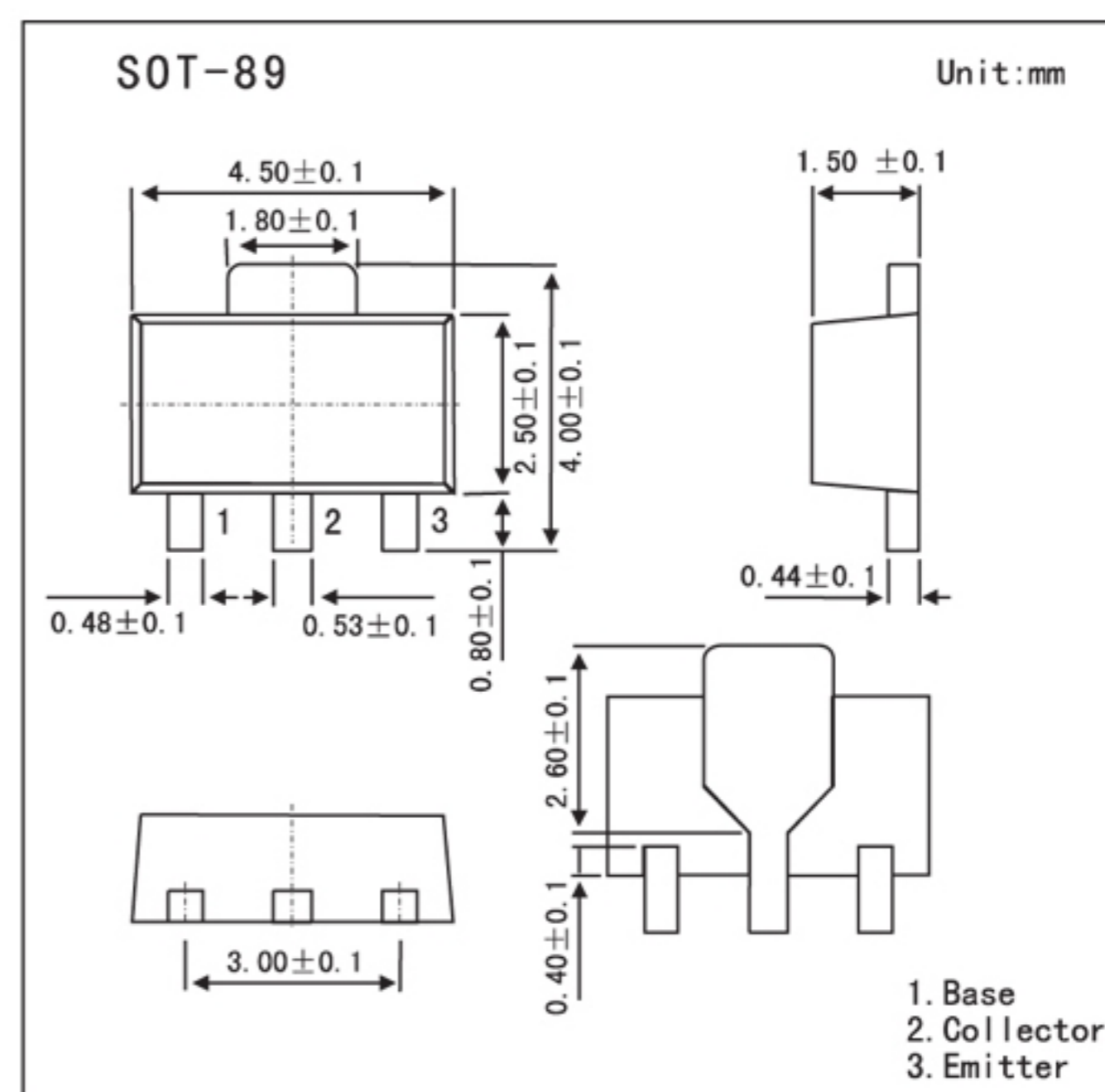


● Features

- High Breakdown Voltage
- Adoption of MBIT Process

● Excellent hFE Linearity.



● Absolute Maximum Ratings Ta = 25°C

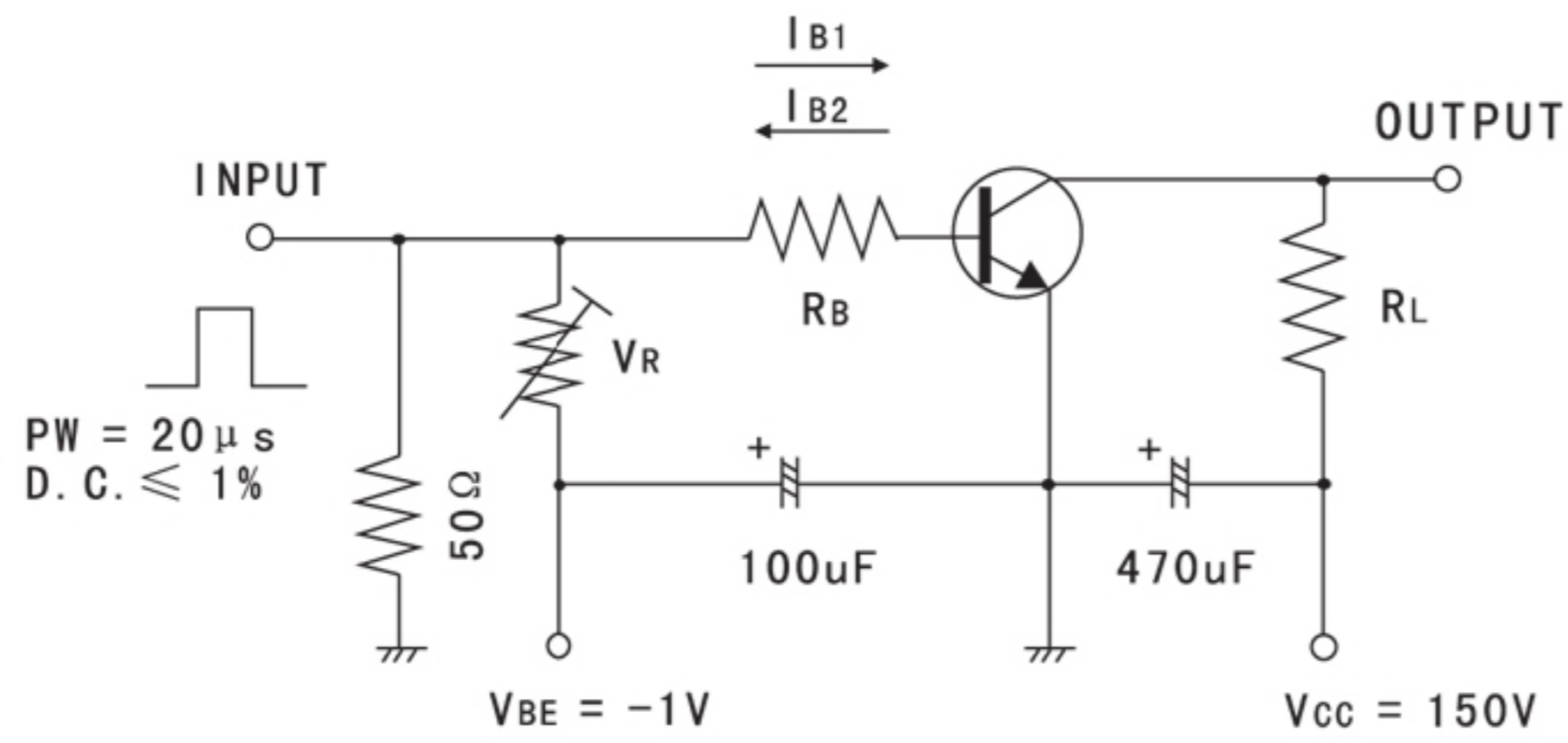
| Parameter | Symbol | Rating | Unit |
|-----------------------------|------------------|-------------|------|
| Collector-Base Voltage | V _{CB0} | 400 | V |
| Collector-Emitter Voltage | V _{CEO} | 400 | V |
| Emitter-Base Voltage | V _{EBO} | 5 | V |
| Collector Current | I _c | 200 | mA |
| Collector Current (Pulse) | I _{CP} | 400 | mA |
| Collector Power Dissipation | P _C * | 1.3 | W |
| Junction temperature | T _j | 150 | °C |
| Storage temperature Range | T _{stg} | -55 to +150 | °C |

* Mounted on ceramic board (250 mm² x 0.8 mm)

● Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|--------------------------------------|----------------------|---|-----|------|-----|------|
| Collector Cut-off Current | I _{CBO} | V _{CB} = 300V , I _E = 0 | | | 0.1 | μA |
| Emitter Cut-off Current | I _{EBO} | V _{EB} = 4V , I _C = 0 | | | 0.1 | μA |
| Collector-Base Breakdown Voltage | V _{(BR)CBO} | I _C = 10μA , I _E = 0 | 400 | | | V |
| Collector-Emitter Breakdown Voltage | V _{(BR)CEO} | I _C = 1mA , R _{BE} = ∞ | 400 | | | V |
| Emitter-Base Breakdown Voltage | V _{(BR)EBO} | I _E = 10μA , I _C = 0 | 5 | | | V |
| DC Current Gain | h _{FE} | V _{CE} = 10V , I _C = 50mA | 60 | | 200 | |
| Collector-Emitter Saturation Voltage | V _{CE(sat)} | I _C = 50mA , I _B = 5mA | | | 0.8 | V |
| Base-Emitter Saturation Voltage | V _{BE(sat)} | I _C = 50mA , I _B = 5mA | | | 1 | V |
| Gain-Bandwidth Product | f _T | V _{CE} = 30V , I _C = 10mA | | 70 | | MHz |
| Collector Output Capacitance | C _{ob} | V _{CB} = 30V , I _E = 0 , f = 1MHz | | 5 | | pF |
| Reverse Transfer Capacitance | C _{re} | V _{CB} = 30V , I _E = 0 , f = 1MHz | | 4 | | pF |
| Turn-On Time | t _{on} | See Test Circuit. | | 0.25 | | μs |
| Turn-Off Time | t _{off} | | | 5.0 | | |

Test Circuit



$$10I_{B1} = -10I_{B2} = I_C = 50mA$$

$$R_L = 3k\Omega, R_B = 200\Omega \text{ at } I_C = 50mA$$

hFE Classification

| Marking | CN | |
|---------|----------|-----------|
| Rank | D | E |
| hFE | 60 ~ 120 | 100 ~ 200 |

Electrical Characteristics Curves

