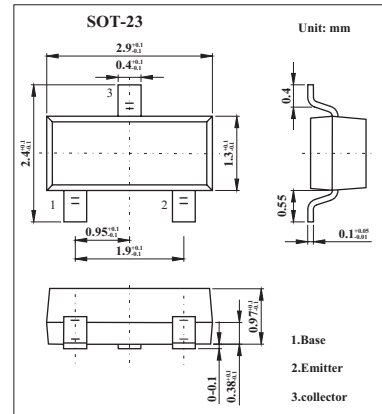


BF820, BF822

■ **Features**

- Low current (max. 50 mA)
- High voltage (max. 300 V).



■ **Absolute Maximum Ratings Ta = 25°C**

| Parameter | Symbol | Rating | Unit |
|---|---------|-------------|------|
| Collector-base voltage | BF820 | 300 | V |
| | BF822 | 250 | V |
| Collector-emitter voltage | BF820 | 300 | V |
| | BF822 | 250 | V |
| Emitter-base voltage | VEBO | 5 | V |
| Collector current | IC | 50 | mA |
| Peak collector current | ICM | 100 | mA |
| Peak base current | IBM | 50 | mA |
| Total power dissipation * | Ptot | 250 | mW |
| Storage temperature | Tstg | -65 to +150 | °C |
| Junction temperature | Tj | 150 | °C |
| Operating ambient temperature | Ramb | -65 to +150 | °C |
| Thermal resistance from junction to ambient * | Rth j-a | 500 | K/W |

* Transistor mounted on an FR4 printed-circuit board.

■ **Electrical Characteristics Ta = 25°C**

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|--------------------------------------|--------|-------------------------------------|-----|-----|-----|------|
| Collector cutoff current | ICBO | IE = 0; VCB = 200 V | | | 10 | nA |
| | | IE = 0; VCB = 200 V; Tj = 150 °C | | | 10 | µA |
| Emitter cutoff current | IEBO | IC = 0; VEB = 5 V | | | 50 | nA |
| DC current gain * | hFE | IC = 25 mA; VCE = 20 V | 50 | | | |
| collector-emitter saturation voltage | VCEsat | IC = 30 mA; IB = 5 mA | | | 600 | mV |
| Feedback capacitance | Cre | IC = IC = 0; VCB = 30 V; f = 1 MHz | | | 1.6 | pF |
| Transition frequency | fT | IC = 10 mA; VCE = 10 V; f = 100 MHz | 60 | | | MHz |

■ **hFE Classification**

| TYPE | BF820 | BF822 |
|---------|-------|-------|
| Marking | 1V | 1X |