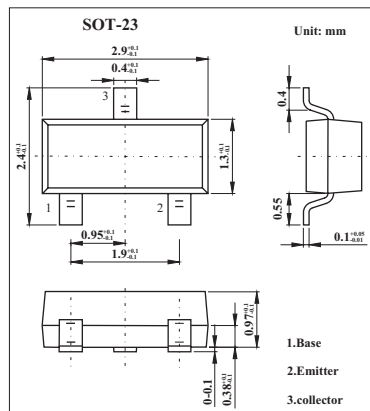


KC807(BC807)

■ Features

- For general AF applications.
- High collector current.
- High current gain.
- Low collector-emitter saturation voltage.



■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|---------------------------|------------------|-------------|------|
| Collector-base voltage | V _{CB0} | -50 | V |
| Collector-emitter voltage | V _{CEO} | -45 | V |
| Emitter-base voltage | V _{EBO} | -5 | V |
| Collector current (DC) | I _c | -800 | mA |
| power dissipation | P _D | 310 | mW |
| Junction temperature | T _j | 150 | °C |
| Storage temperature | T _{stg} | -65 to +150 | °C |

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|--|----------------------|---|-----|-----|------|------|
| Collector-to-base breakdown voltage | V _{CB0} | I _c = -10 μA, V _{BE} = 0 | -50 | | | V |
| Collector-to-emitter breakdown voltage | V _{CEO} | I _c = -10 mA, I _B = 0 | -45 | | | V |
| Emitter-to-base breakdown voltage | V _{EBO} | I _E = -10 μA, I _c = 0 | -5 | | | V |
| Collector cutoff current | I _{CES} | V _{CB} = -25 V, V _{BE} = 0 | | | -100 | nA |
| Emitter cutoff current | I _{EBO} | V _{EB} = -4 V, I _c = 0 | | | -100 | nA |
| DC current gain * | h _{FE} | I _c = -100 mA, V _{CE} = -1 V | 100 | | 630 | |
| | | I _c = -300 mA, V _{CE} = -1 V | 60 | | | |
| Collector saturation voltage * | V _{CE(sat)} | I _c = -500 mA, I _B = -50 mA | | | -0.7 | V |
| Base emitter on voltage | V _{BE(on)} | V _{CE} = -1V, I _c = 300mA | | | -1.2 | V |
| Output Capacitance | C _{ob} | V _{CB} = -10V, f = 1MHz | | | 12 | pF |
| Transition frequency | f _T | I _c = -10 mA, V _{CE} = -5 V, f = 50 MHz | | 100 | | MHz |

* Pulsed: PW ≤ 350 μs, duty cycle ≤ 2%

■ Marking

| NO. | KC807-16 | KC807-25 | KC807-40 |
|---------|----------|----------|----------|
| Marking | 9FA | 9FB | 9FC |
| hFE | 100~250 | 160~400 | 250~630 |