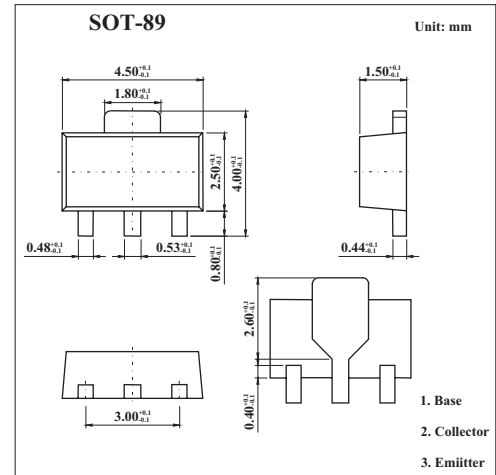


Medium Power Transistor

FCX491

■ Features

- 60 Volt V_{CE0} .
- 1 Amp continuous current.
- P_{tot} = 1 Watt.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|---|----------------|-------------|------------------|
| Collector-base voltage | V_{CBO} | 80 | V |
| Collector-emitter voltage | V_{CEO} | 60 | V |
| Emitter-base voltage | V_{EBO} | 5 | V |
| Peak pulse current | I_c | 1 | A |
| Continuous collector current | I_{CM} | 2 | A |
| Power dissipation | P_{tot} | 1 | W |
| Operating and storage temperature range | T_j, T_{stg} | -65 to +150 | $^\circ\text{C}$ |

FCX491

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|---|-----------------------|--|-----|-----|-------------|------|
| Breakdown Voltages | V _{(BR)CBO} | I _C =100μA | 80 | | | V |
| Breakdown Voltages | V _{CEO(sus)} | I _C =10mA | 60 | | | V |
| Breakdown Voltages | V _{(BR)EBO} | I _E =100μA | 5 | | | V |
| Collector-base cut-off current | I _{CBO} | V _{CB} =60V | | | 100 | nA |
| | I _{CES} | V _{CE} =60V | | | 100 | nA |
| Emitter-base current | I _{EBO} | V _{EB} =4V | | | 100 | nA |
| Collector-emitter saturation voltage * | V _{CE(sat)} | I _C =500mA, I _B =50mA I _C =1A, I _B =100mA | | | 0.25 0.5 | V |
| Base-emitter saturation voltage * | V _{BE(sat)} | I _C =1A, I _B =100mA | | | 1.1 | V |
| Base-emitter ON voltage * | V _{BE(on)} | I _C =1A, V _{CE} =5V | | | 1.0 | V |
| Static Forward Current Transfer Ratio * | h _{FE} | I _C =1mA, V _{CE} =5V | 100 | | | |
| | | I _C =500mA, V _{CE} =5V* | 100 | | 300 | |
| | | I _C =1A, V _{CE} =5V* | 80 | | | |
| | | I _C =2A, V _{CE} =5V* | 30 | | | |
| Transitional frequency | f _T | I _C =50mA, V _{CE} =10V f=100MHz | 150 | | | MHz |
| Output capacitance | C _{obo} | V _{CB} =10V, f=1MHz | | | 10 | pF |

* Pulse test: t_p = 300 μs; d ≤ 0.02.

■ Marking

| | |
|---------|----|
| Marking | N1 |
|---------|----|