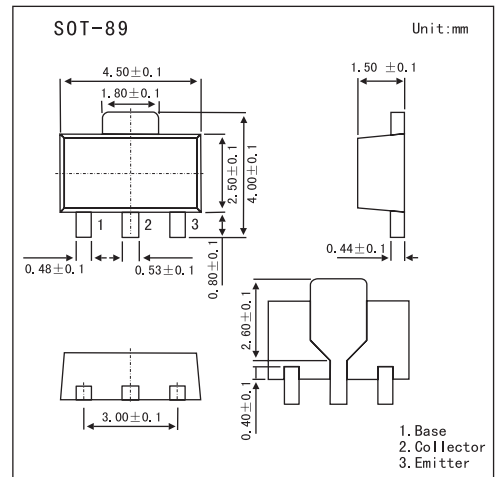


FCX658A

■ Features

- 400 Volt V_{CEO}
- 0.5 Amp continuous current
- P_{tot}=1 Watt
- Optimised h_{fe} characterised upto 200mA



■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|---|----------------------------------|-------------|--------|
| Collector-Base Voltage | V _{CBO} | 400 | V |
| Collector-Emitter Voltage | V _{CEO} | 400 | V |
| Emitter-Base Voltage | V _{EBO} | 5 | V |
| Peak Pulse Current | I _{CM} | 1 | A |
| Continuous Collector Current | I _C | 500 | mA |
| Power Dissipation at T _{amb} =25°C | P _{tot} | 1 | W |
| derate above 25°C | | 5.7 | mW/ °C |
| Operating and Storage Temperature Range | T _j :T _{stg} | -55 to +150 | °C |

FCX658A

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|---------------------------------------|----------------------|---|-----|------|-------|------|
| Collector-Base Breakdown Voltage | V _{(BR)CBO} | I _C =100μA | 400 | 480 | | V |
| Collector-Emitter Breakdown Voltage | V _{(BR)CEO} | I _C =10mA* | 400 | 465 | | V |
| Emitter-Base Breakdown Voltage | V _{(BR)EBO} | I _E =100μA | 5 | 7.8 | | V |
| Collector Cut-Off Current | I _{CBO} | V _{CB} =320V | | | 100 | nA |
| Collector Cut-Off Current | I _{CES} | V _{CE} =320V | | | 100 | nA |
| Emitter Cut-Off Current | I _{EBO} | V _{EB} =4V | | | 100 | nA |
| Collector-Emitter Saturation Voltage | V _{CE(sat)} | I _C =20mA, I _B =1mA | | | 0.165 | V |
| | | I _C =50mA, I _B =5mA* | | | 0.125 | |
| | | I _C =100mA, I _B =10mA* | | | 0.2 | |
| Base-Emitter Saturation Voltage | V _{BE(sat)} | I _C =100mA, I _B =10mA* | | 0.75 | 0.85 | V |
| Base-Emitter Turn On Voltage | V _{BE(on)} | I _C =100mA, V _{CE} =5V* | | 0.70 | 0.85 | V |
| Static Forward Current Transfer Ratio | h _{FE} | I _C =1mA, V _{CE} =5V* | 85 | 150 | | |
| | | I _C =10mA, V _{CE} =10V* | 100 | 170 | | |
| | | I _C =100mA, V _{CE} =5V* | 55 | 130 | | |
| | | I _C =200mA, V _{CE} =10V* | 35 | 90 | | |
| Transition Frequency | f _T | I _C =20mA, V _{CE} =20V, f=20MHz | 50 | | | MHz |
| Output Capacitance | C _{obo} | V _{CB} =20V, f=1MHz | | | 10 | pF |
| Switching times | t _{on} | I _C =100mA, V _C =100V | | 130 | | ns |
| | t _{off} | I _{B1} =10mA, I _{B2} =-20mA | | 3300 | | ns |

* Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤2%

■ Marking

| | |
|---------|-----|
| Marking | 65A |
|---------|-----|