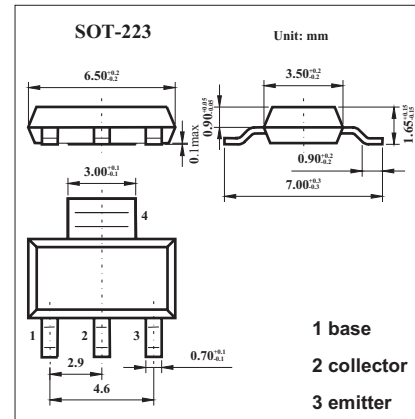


NPN Silicon Planar Medium Power High Gain Transistor FZT692B

■ Features

- High gain + very low saturation voltage.



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

| Parameter | Symbol | Rating | Unit |
|---|----------------|-------------|------------------|
| Collector-base voltage | V_{CB0} | 70 | V |
| Collector-emitter voltage | V_{CE0} | 70 | V |
| Emitter-base voltage | V_{EB0} | 5 | V |
| Peak pulse current | I_c | 2 | A |
| Continuous collector current | I_{CM} | 5 | A |
| Power dissipation | P_{tot} | 2 | W |
| Operating and storage temperature range | T_j, T_{stg} | -55 to +150 | $^\circ\text{C}$ |

FZT692B

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|---|----------------------|--|-------------------|------|--------------------|------|
| Breakdown Voltages | V _{(BR)CBO} | I _C =100μA | 70 | | | V |
| Breakdown Voltages | V _{(BR)CEO} | I _C =10mA * | 70 | | | V |
| Breakdown Voltages | V _{(BR)EBO} | I _E =100μA | 5 | | | V |
| Cut-Off Currents | I _{CBO} | V _{CB} =55V | | | 0.1 | μA |
| Cut-Off Currents | I _{EBO} | V _{EB} =4V | | | 0.1 | μA |
| Saturation Voltages* | V _{CE(sat)} | I _C =0.1A, I _B =0.5mA I _C =1A, I _B =10mA I _C =2A, I _B =200mA | | | 0.15 0.5 0.5 | V |
| Saturation Voltages | V _{BE(sat)} | I _C =1A, I _B =10mA | | | 0.9 | V |
| Base-emitter ON voltage * | V _{BE(on)} | I _C =1A, V _{CE} =2V | | | 0.9 | V |
| Static Forward Current Transfer Ratio * | h _{FE} | I _C =100mA, V _{CE} =2V I _C =500mA, V _{CE} =2V I _C =1A, V _{CE} =2V | 500 400 150 | | | |
| Transitional frequency | f _T | I _C =50mA, V _{CE} =5V f=50MHz | 150 | | | MHz |
| Input capacitance | C _{ibo} | V _{EB} =0.5V, f=1MHz | | 200 | | pF |
| Output capacitance | C _{obo} | V _{CB} =10V, f=1MHz | | 12 | | pF |
| Turn-on time | t _(on) | I _C =500mA, V _{CC} =10V | | 46 | | ns |
| Turn-off time | t _(off) | I _{B1} =I _{B2} =50mA | | 1440 | | ns |

* Pulse test: t_p = 300 μs; d ≤ 0.02.

■ Marking

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|---------|---------|
| Marking | FZT692B |
|---------|---------|