



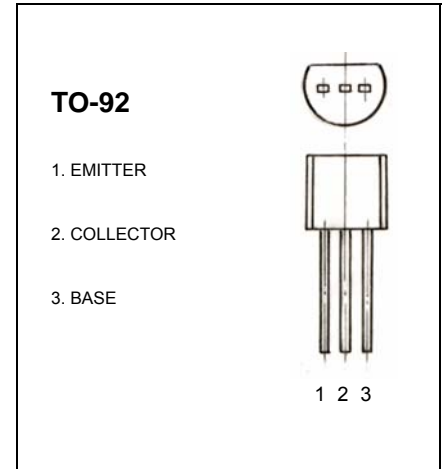
KTC3203 TRANSISTOR (NPN)

FEATURES

- Complementary to KTA1271

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

| Symbol | Parameter | Value | Units |
|------------------|-------------------------------|---------|-------|
| V _{CBO} | Collector-Base Voltage | 35 | V |
| V _{CEO} | Collector-Emitter Voltage | 30 | V |
| V _{EBO} | Emitter-Base Voltage | 5 | V |
| I _C | Collector Current -Continuous | 800 | mA |
| P _C | Collector Power Dissipation | 625 | mW |
| T _J | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature | -55-150 | °C |



ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|----------------------|--|-----|-----|-----|------|
| Collector-base breakdown voltage | V _{(BR)CBO} | I _C = 0.1mA, I _B =0 | 35 | | | V |
| Collector-emitter breakdown voltage | V _{(BR)CEO} | I _C = 10mA, I _B =0 | 30 | | | V |
| Emitter-base breakdown voltage | V _{(BR)EBO} | I _E = 0.1mA, I _C =0 | 5 | | | V |
| Collector cut-off current | I _{CBO} | V _{CB} = 35V, I _E =0 | | | 0.1 | μA |
| Collector cut-off current | I _{CEO} | V _{CE} = 25V, I _B =0 | | | 0.2 | μA |
| Emitter cut-off current | I _{EBO} | V _{EB} = 5V, I _C =0 | | | 0.1 | μA |
| DC current gain | h _{FE(1)} | V _{CE} =1V, I _C = 100mA | 100 | | 320 | |
| | h _{FE(2)} | V _{CE} =1V, I _C = 700mA | 35 | | | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C = 500 mA, I _B = 20mA | | | 0.5 | V |
| Base-emitter voltage | V _{BE} | V _{CE} = 1V, I _C = 10mA | | | 0.8 | V |
| Transition frequency | f _T | V _{CE} = 5 V, I _C = 10mA | | 120 | | MHz |
| Collector Output Capacitance | C _{ob} | V _{CB} =10V, I _E = 0, f=1MHz | | 13 | | pF |

CLASSIFICATION OF h_{FE(1)}

| | | |
|-------|---------|---------|
| Rank | O | Y |
| Range | 100-200 | 160-320 |