



TO-126 Plastic-Encapsulate Transistors

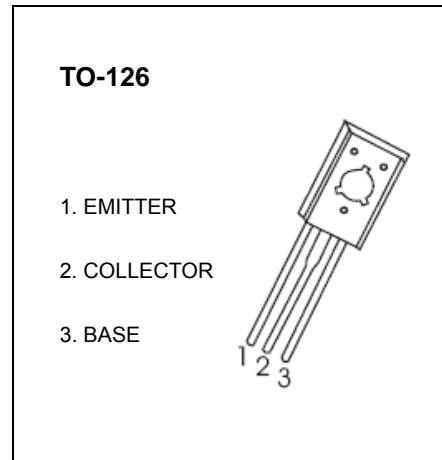
D882 TRANSISTOR (NPN)

FEATURES

- Power Dissipation

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

| Symbol | Parameter | Value | Unit |
|------------------|-------------------------------|---------|------|
| V _{CBO} | Collector-Base Voltage | 40 | V |
| V _{CEO} | Collector-Emitter Voltage | 30 | V |
| V _{EBO} | Emitter-Base Voltage | 6 | V |
| I _C | Collector Current -Continuous | 3 | A |
| P _C | Collector Power Dissipation | 1.25 | W |
| T _J | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature | -55-150 | °C |



ELECTRICAL CHARACTERISTICS (Ta=25 °C unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------------------|----------------------|--|-----|-----|-----|------|
| Collector-base breakdown voltage | V(BR) _{CBO} | I _C = 100μA, I _E =0 | 40 | | | 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 = 100μA, I _C =0 | 5 | | | V |
| Collector cut-off current | I _{CBO} | V _{CB} = 40 V, I _E =0 | | | 1 | μA |
| Collector cut-off current | I _{CEO} | V _{CE} = 30 V, I _B =0 | | | 10 | μA |
| Emitter cut-off current | I _{EBO} | V _{EB} = 6 V, I _C =0 | | | 1 | μA |
| DC current gain | h _{FE} | V _{CE} = 2 V, I _C = 1A | 60 | | 400 | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C = 2A, I _B = 0.2 A | | | 0.5 | V |
| Base-emitter saturation voltage | V _{BE(sat)} | I _C = 2A, I _B = 0.2 A | | | 1.5 | V |
| Transition frequency | f _T | V _{CE} = 5V, I _C =0.1A f =10MHz | | 90 | | MHz |

CLASSIFICATION OF h_{FE}

| Rank | R | O | Y | GR |
|-------|--------|---------|---------|---------|
| Range | 60-120 | 100-200 | 160-320 | 200-400 |

Typical Characteristics

D882

