



TO-251 Plastic-Encapsulate Transistors

B772 TRANSISTOR (PNP)

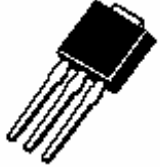
FEATURES

- Low speed switching

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

| Symbol | Parameter | Value | Units |
|------------------|---|---------|-------|
| 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 |
| R _{θJA} | Thermal Resistance, junction to Ambient | 100 | °C/W |
| T _J | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature | -55-150 | °C |

TO-251

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1. EMITTER
2. COLLECTOR
3 BASE 1 2 3

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 =-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 | -6 | | | V |
| Collector cut-off current | I _{CBO} | V _{CB} = -40V, I _E =0 | | | -1 | μA |
| Collector cut-off current | I _{CEO} | V _{CE} =-30V, I _B =0 | | | -10 | μA |
| Emitter cut-off current | I _{EBO} | V _{EB} =-6V, I _C =0 | | | -1 | μA |
| DC current gain | h _{FE} | V _{CE} = -2V, I _C = -1A | 60 | | 400 | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C =-2A, I _B = -0.2A | | | -0.5 | V |
| Base-emitter saturation voltage | V _{BE(sat)} | I _C =-2A, I _B = -0.2A | | | -1.5 | V |
| Transition frequency | f _T | V _{CE} = -5V, I _C =-0.1A f =10MHZ | 50 | 80 | | MHz |

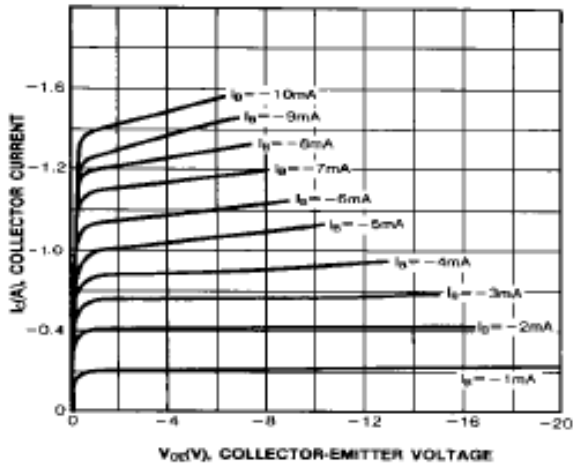
CLASSIFICATION OF h_{FE}

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

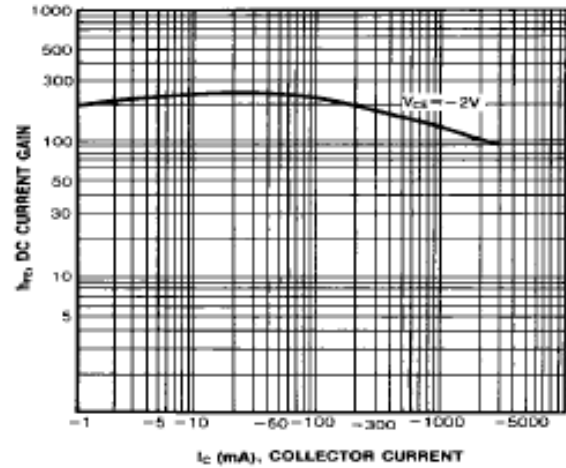
Typical characteristics

B772

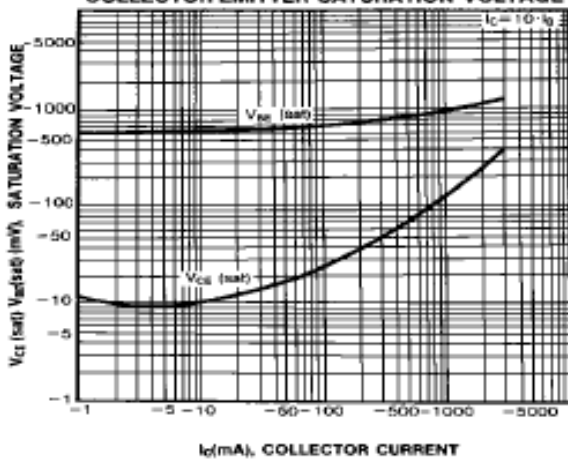
STATIC CHARACTERISTIC



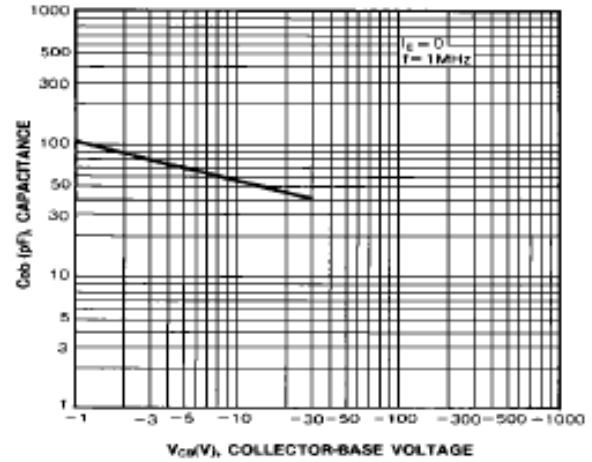
DC CURRENT GAIN



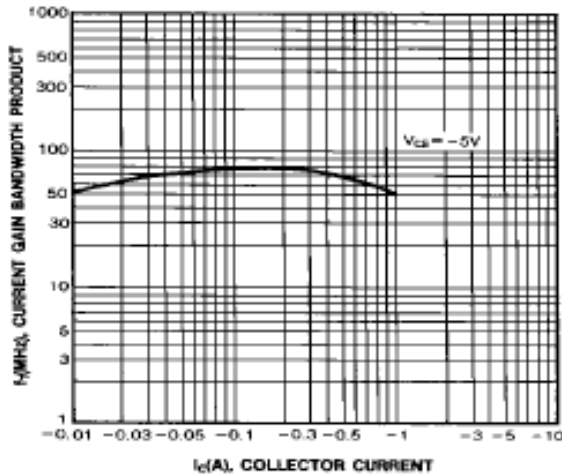
BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



COLLECTOR OUTPUT CAPACITANCE



CURRENT GAIN-BANDWIDTH PRODUCT



SAFE OPERATING AREA

