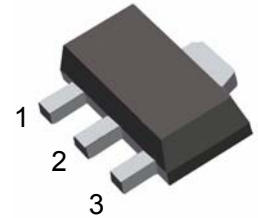




B772 SOT-89

SOT-89

- 1. BASE
- 2. COLLECTOR
- 3. EMITTER



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

| Symbol | Parameter | Value | Units |
|------------------|-------------------------------|---------|-------|
| V _{CB0} | Collector-Base Voltage | -40 | V |
| V _{CEO} | Collector-Emitter Voltage | -30 | V |
| V _{EBO} | Emitter-Base Voltage | -5 | V |
| I _C | Collector Current -Continuous | -3 | A |
| P _C | Collector Power Dissipation | 0.5 | W |
| T _j | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature | -55-150 | °C |

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

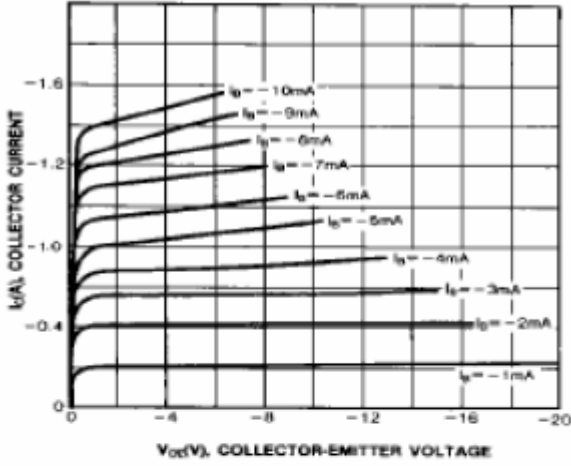
| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|----------------------|--|-----|-----|------|------|
| Collector-base breakdown voltage | V _{(BR)CB0} | I _C =-100μA, I _E =0 | -40 | | | V |
| Collector-emitter breakdown voltage | V _{(BR)CEO} | 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 _{CB0} | 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 | | 80 | | MHz |

CLASSIFICATION OF h_{FE}

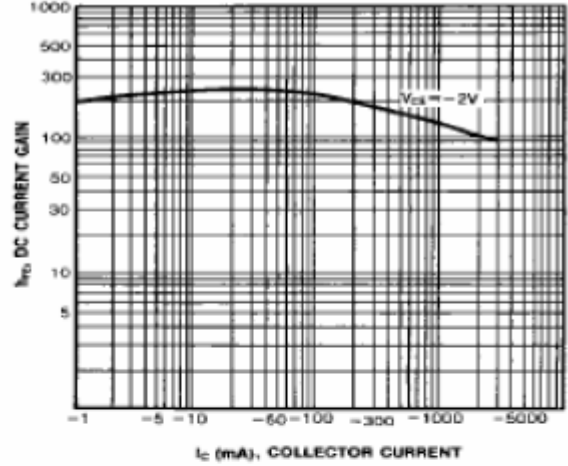
| Rank | R | O | Y | GR |
|-------|--------|---------|---------|---------|
| Range | 60-120 | 100-200 | 160-320 | 200-400 |



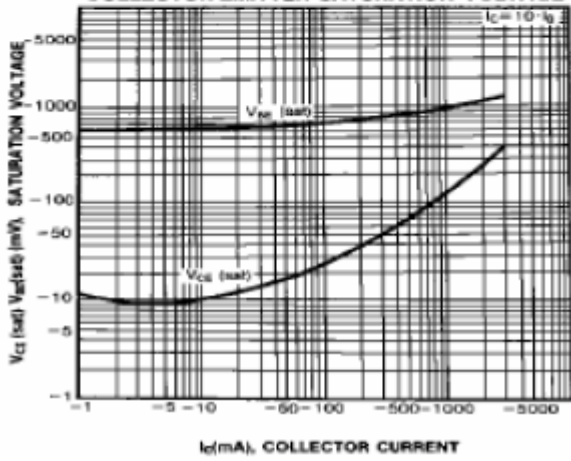
STATIC CHARACTERISTIC



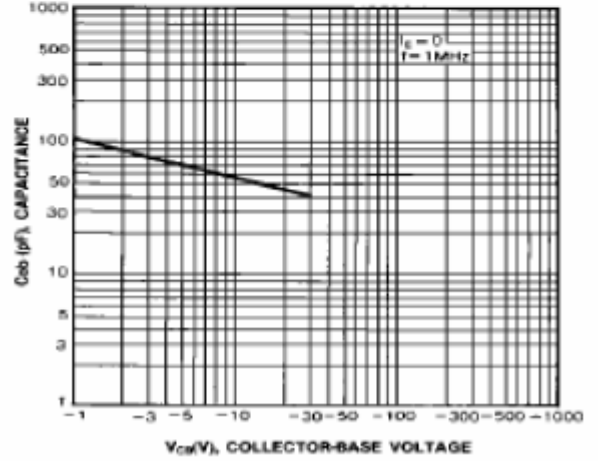
DC CURRENT GAIN



BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



COLLECTOR OUTPUT CAPACITANCE



CURRENT GAIN-BANDWIDTH PRODUCT

