

TRANSISTOR (PNP)

SOT-89

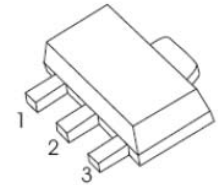
FEATURE

- Low speed switching

MARKING: B772

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

| Symbol | Parameter | Value | Unit |
|-----------------------------------|--|---------|------|
| V _{CB0} | 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 | 0.5 | W |
| R _{θJA} | Thermal Resistance, Junction to Ambient | 250 | °C/W |
| T _J , T _{stg} | Operation Junction and Storage Temperature Range | -55~150 | °C |



1. BASE

2. COLLECTOR

3. EMITTER

ELECTRICAL CHARACTERISTICS (T_a=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 | | | MHz |

CLASSIFICATION OF h_{FE}

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

Typical Characteristics

