



**B772** TRANSISTOR (PNP)

**FEATURE**

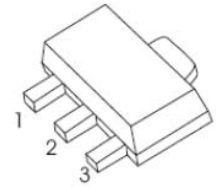
- Low speed switching

**MARKING: B772**

**MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)**

| Symbol           | Parameter                               | Value   | Unit |
|------------------|---|---------|------|
| V <sub>CB0</sub> | Collector-Base Voltage                  | -40     | V    |
| V <sub>CEO</sub> | Collector-Emitter Voltage               | -30     | V    |
| V <sub>EBO</sub> | Emitter-Base Voltage                    | -6      | V    |
| I <sub>C</sub>   | Collector Current -Continuous           | -3      | A    |
| P <sub>C</sub>   | Collector Power Dissipation             | 0.5     | W    |
| R <sub>θJA</sub> | Thermal Resistance, Junction to Ambient | 250     | °C/W |
| T <sub>J</sub>   | Junction Temperature                    | 150     | °C   |
| T <sub>stg</sub> | Storage Temperature                     | -55~150 | °C   |

**SOT-89-3L**



1. BASE
2. COLLECTOR
3. EMITTER

**ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)**

| Parameter                            | Symbol               | Test conditions  | Min | Typ | Max  | Unit |
|--------------------------------------|----------------------|--|-----|-----|------|------|
| Collector-base breakdown voltage     | V <sub>(BR)CBO</sub> | I <sub>C</sub> =-100μA, I <sub>E</sub> =0                | -40 |     |      | V    |
| Collector-emitter breakdown voltage  | V <sub>(BR)CEO</sub> | I <sub>C</sub> = -10mA, I <sub>B</sub> =0                | -30 |     |      | V    |
| Emitter-base breakdown voltage       | V <sub>(BR)EBO</sub> | I <sub>E</sub> = -100μA, I <sub>C</sub> =0               | -6  |     |      | V    |
| Collector cut-off current            | I <sub>CBO</sub>     | V <sub>CB</sub> = -40V, I <sub>E</sub> =0                |     |     | -1   | μA   |
| Collector cut-off current            | I <sub>CEO</sub>     | V <sub>CE</sub> =-30V, I <sub>B</sub> =0                 |     |     | -10  | μA   |
| Emitter cut-off current              | I <sub>EBO</sub>     | V <sub>EB</sub> =-6V, I <sub>C</sub> =0                  |     |     | -1   | μA   |
| DC current gain                      | h <sub>FE</sub>      | V <sub>CE</sub> = -2V, I <sub>C</sub> = -1A              | 60  |     | 400  |      |
| Collector-emitter saturation voltage | V <sub>CE(sat)</sub> | I <sub>C</sub> =-2A, I <sub>B</sub> = -0.2A              |     |     | -0.5 | V    |
| Base-emitter saturation voltage      | V <sub>BE(sat)</sub> | I <sub>C</sub> =-2A, I <sub>B</sub> = -0.2A              |     |     | -1.5 | V    |
| Transition frequency                 | f <sub>T</sub>       | V <sub>CE</sub> = -5V, I <sub>C</sub> =-0.1A<br>f =10MHz | 50  |     |      | MHz  |

**CLASSIFICATION OF h<sub>FE</sub>**

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

