Elektronische Bauelemente

# BCP772

**PNP Epitaxial Planar**

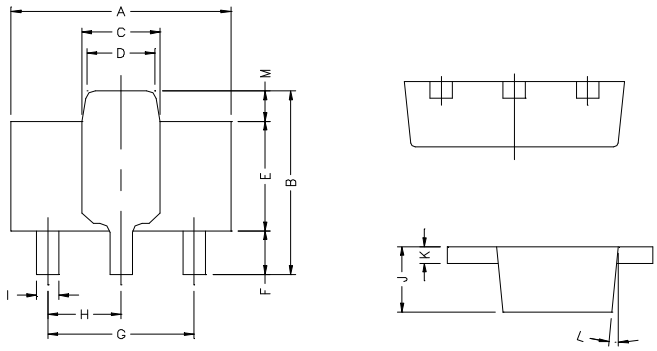
**General Purpose Transistor**

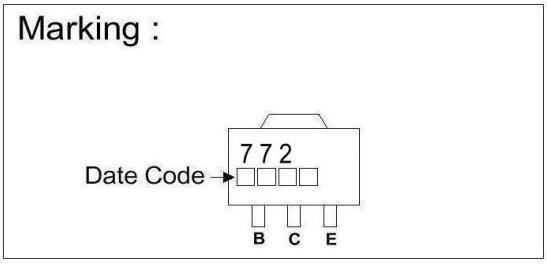
RoHS Compliant Product

**SOT-89**

## Description

The BCP772 is designed for using in output stage of amplifier, voltage regulator, DC-DC converter and relay driver.




| REF. | Millimeter | | REF. | Millimeter | |
|---|---|---|---|---|---|
| | Min. | Max. | | Min. | Max. |
| A | 4.4 | 4.6 | G | 3.00 REF. | |
| B | 4.05 | 4.25 | H | 1.50 REF. | |
| C | 1.50 | 1.70 | I | 0.40 | 0.52 |
| D | 1.30 | 1.50 | J | 1.40 | 1.60 |
| E | 2.40 | 2.60 | K | 0.35 | 0.41 |
| F | 0.89 | 1.20 | L | 5° TYP. | |
| | | | M | 0.70 REF. | |

## Absolute Maximum Ratings at $T_A$=25°C (unless otherwise specified)

| Parameter | Symbol | Ratings | Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | -40 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | -30 | V |
| Emitter to Base Voltage | $V_{EBO}$ | -5 | V |
| Collect Current | $I_C$ | -3 | A |
| Total Power Dissipation (TC=25℃) | $P_D$ | 1.2 | W |
| Operating Junction and Storage Temperature Range | Tj, Tstg | -55~+150 | ℃ |

## ELECTRICAL CHARACTERISTICS Tamb=25°C unless otherwise specified

| Parameter | Symbol | Min | Typ. | Max | Unit | Test Conditions |
|---|---|---|---|---|---|---|
| Collector-Base Breakdown Voltage | $BV_{CBO}$ | -40 | - | - | V | $I_C$=-100μA |
| Collector-Emitter Breakdown Voltage | $BV_{CEO}$ | -30 | - | - | V | $I_C$=-1mA |
| Emitter-Base Breakdown Voltage | $BV_{EBO}$ | -5 | - | - | V | $I_E$=-10μA |
| Collector-Base Cutoff Current | $I_{CBO}$ | - | - | -1 | uA | $V_{CB}$=-30V |
| Emitter-Base Cutoff Current | $I_{EBO}$ | - | - | -1 | uA | $V_{BE}$=-3V |
| Collector Saturation Voltage | $V_{CE}$(sat) | - | -0.3 | -0.5 | V | $I_C$=-2A,$I_B$=-0.2A |
| Base Satruation Voltage | $V_{BE}$(sat) | - | -1 | -2 | V | $I_C$=-2A,$I_B$=-0.2A |
| DC Current Gain | $h_{FE}$1 | 30 | - | - | | $V_{CE}$=-2V, $I_C$=-20mA |
| | $h_{FE}$2 | 100 | 160 | 500 | | $V_{CE}$=-2V, $I_C$=-1A |
| Gain-Bandwidth Product | fT | - | 80 | - | MHz | $V_{CE}$=-5V, $I_C$=-20mA,f=100MHz |
| Output Capacitance | $C_{ob}$ | - | 55 | - | pF | $V_{CB}$=-10V, f=1MHz |

### Classification of hFE2

| Rank | Q | P | E |
|---|---|---|---|
| Range | 100~200 | 160~320 | 250~500 |

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## Characteristics Curve