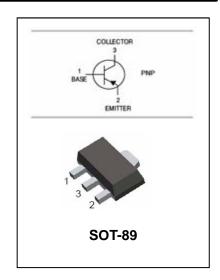


B772

FEATURES

- Low speed switching.
- Low saturation voltage.
- Excellent h_{FE} linearity and high h_{FE}.
- Complementary: D882.



APPLICATIONS

• Audio frequency power amplifier.

ORDERING INFORMATION

| Type No. | Marking | Package Code | |
|----------|---------|--------------|--|
| B772 | B772 | SOT-89 | |

MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Symbol | Parameter | Value | Units |
|------------------|----------------------------------|---------|--------------|
| V_{CBO} | 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 | Α |
| P _C | Collector Dissipation | 500 | mW |
| $T_{j,}T_{stg}$ | Junction and Storage Temperature | -55~150 | \mathbb{C} |



B772

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|----------------------|--|-----|------|------|------|
| Collector-base breakdown voltage | V _{(BR)CBO} | I _C =-100μΑ,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 _B =0 | | | -1 | μA |
| Collector cut-off current | I _{CEO} | V _{CB} =-30V,I _E =0 | | | -1 | μA |
| Emitter cut-off current | I _{EBO} | V _{EB} =-6V,I _C =0 | | | -1 | μA |
| DC current gain | h | V _{CE} =-2V,I _C =-1A | 60 | 160 | 400 | |
| DO Carrein gain | h _{FE} | V _{CE} =-2V,I _C =-20mA | 30 | 220 | | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C =-2A, I _B = -0.2A | | -0.3 | -0.5 | V |
| Base-emitter saturation voltage | V _{BE(sat)} | I _C =-2A, I _B = -0.2A | | -1.0 | -2.0 | V |
| Transition frequency | f⊤ | V _{CE} =-2V, I _C = -0.5A | | 80 | | MHz |
| Collector output capacitance | C _{ob} | V _{CB} =-10V,I _E =0,f=1MHz | | 55 | | pF |

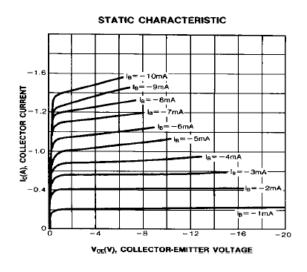
CLASSIFICATION OF hFE

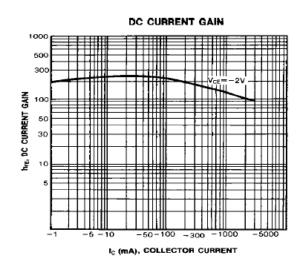
| Rank | R | 0 | Y | G |
|-------|--------|---------|---------|---------|
| Range | 60-120 | 100-200 | 160-320 | 200-400 |

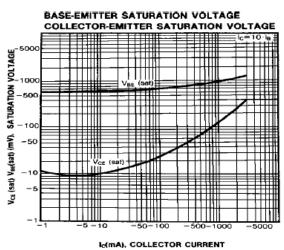


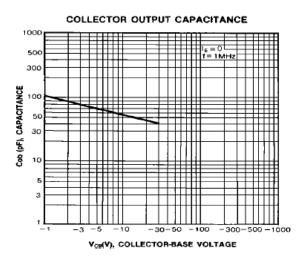
B772

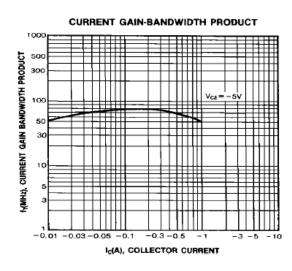
TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

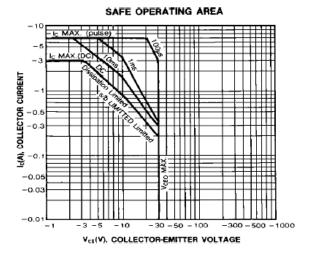












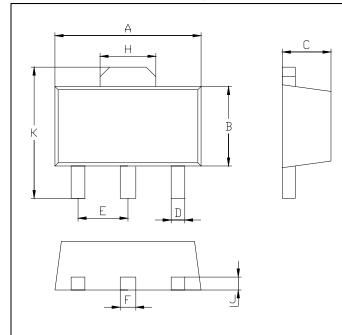


B772

PACKAGE OUTLINE

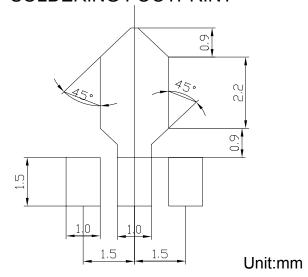
Plastic surface mounted package





| SOT-89 | | | |
|----------------------|------------|------|--|
| Dim | Min Max | | |
| Α | 4.5 | 4.7 | |
| В | 2.3 2.7 | | |
| С | 1.5Typical | | |
| D | 0.35 | 0.55 | |
| E | 1.4 | 1.6 | |
| F | 0.4 0.6 | | |
| Н | 1.55 1.75 | | |
| J | 0.4Typical | | |
| K | 4.15 | 4.25 | |
| All Dimensions in mm | | | |

SOLDERING FOOTPRINT



PACKAGE INFORMATION

| Device | Package | Shipping |
|--------|---------|----------------|
| B772 | SOT-89 | 1000/Tape&Reel |