

Silicon PNP Power Transistor

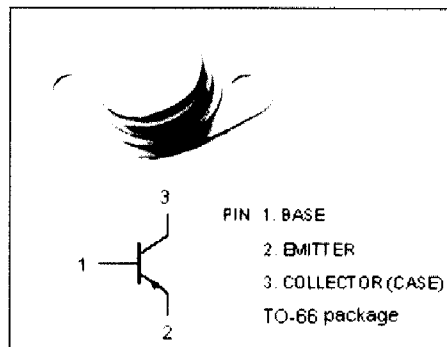
2SA652

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
 : $V_{(BR)CEO} = -100V(\text{Min.})$
- Continuous Collector Current $I_C = -1A$
- Power Dissipation $P_C = 15W @ T_C = 25^\circ C$

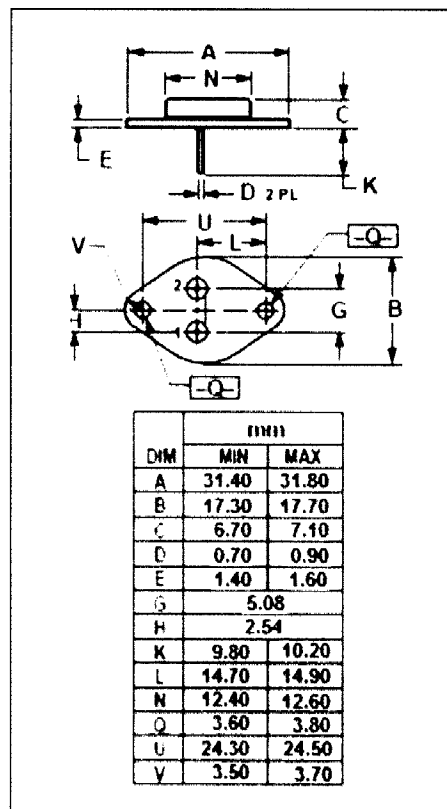
APPLICATIONS

- Designed for low frequency power amplifier color TV vertical deflection output applications.



ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ C$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|-----------------------------------------------|---------|------------|
| V_{CBO} | Collector-Base Voltage | -150 | V |
| V_{CEO} | Collector-Emitter Voltage | -100 | V |
| V_{EBO} | Emitter-Base Voltage | -6 | V |
| I_C | Collector Current-Continuous | -1.0 | A |
| P_C | Collector Power Dissipation@ $T_C=25^\circ C$ | 15 | W |
| T_J | Junction Temperature | 150 | $^\circ C$ |
| T_{stg} | Storage Temperature | -55~150 | $^\circ C$ |



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Silicon PNP Power Transistor

2SA652

ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---------------|--------------------------------------|-------------------------------------------------------|------|------|------|---------------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C = -50\text{mA}$; $I_B = 0$ | -100 | | | V |
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage | $I_C = -1\text{mA}$; $I_E = 0$ | -150 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C = -0.5\text{A}$; $I_B = -50\text{mA}$ | | | -1.5 | V |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage | $I_C = -0.5\text{A}$; $I_B = -50\text{mA}$ | | | -2.0 | V |
| I_{CBO} | Collector Cutoff Current | $V_{CB} = -150\text{V}$; $I_E = 0$ | | | -10 | μA |
| I_{EBO} | Emitter Cutoff Current | $V_{EB} = -5\text{V}$; $I_C = 0$ | | | -10 | μA |
| h_{FE} | DC Current Gain | $I_C = -0.2\text{A}$; $V_{CE} = -5\text{V}$ | 40 | | 200 | |
| C_{OB} | Collector Output Capacitance | $I_E = 0$; $V_{CB} = -5\text{V}$; $f = 1\text{MHz}$ | | 100 | | pF |
| f_T | Current-Gain—Bandwidth Product | $I_C = -0.1\text{A}$; $V_{CE} = -10\text{V}$ | | 15 | | MHz |