

Silicon PNP Power Transistors

2SA653

DESCRIPTION

- With TO-66 package
- High voltage: $V_{CEO}=-120V(\text{min})$

APPLICATIONS

- Low frequency power amplifier color TV vertical deflection output applications

PINNING(see Fig.2)

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Base |
| 2 | Emitter |
| 3 | Collector |



Fig.1 simplified outline (TO-66) and symbol

Absolute maximum ratings($T_a=^{\circ}C$)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|-------------------|---------|-------------|
| V_{CBO} | Collector-base voltage | Open emitter | -150 | V |
| V_{CEO} | Collector-emitter voltage | Open base | -120 | V |
| V_{EBO} | Emitter-base voltage | Open collector | -6 | V |
| I_C | Collector current | | -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 | $^{\circ}C$ |

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CHARACTERISTICS

T_j=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|------|------|------|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =-10mA ; I _B =0 | -120 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =-1mA ; I _E =0 | -150 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =-0.5A ; I _B =-50mA | | | -1.5 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =-0.5A ; I _B =-50mA | | | -2.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-150V ; I _E =0 | | | -10 | μ A |
| I _{EBO} | Emitter cut-off current | V _{EB} =-5V ; I _C =0 | | | -10 | μ A |
| h _{FE} | DC current gain | I _C =-0.2A ; V _{CE} =-5V | 40 | | | |
| f _T | Transition frequency | I _C =-0.1A ; V _{CE} =-10V | | 15 | | MHz |

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PACKAGE OUTLINE

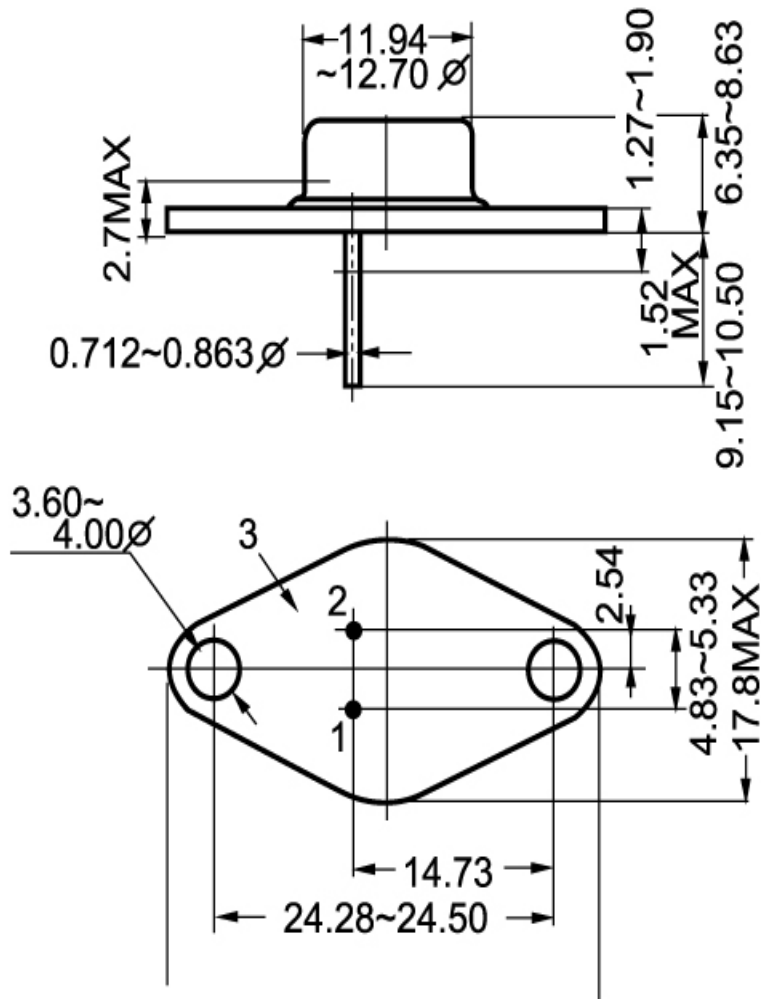


Fig.2 outline dimensions