

Silicon NPN Power Transistors

2SC1520

DESCRIPTION

- With TO-202 package
- High voltage
- High transition frequency

APPLICATIONS

- For color TV chroma output and video output applications

PINNING(see Fig.2)

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

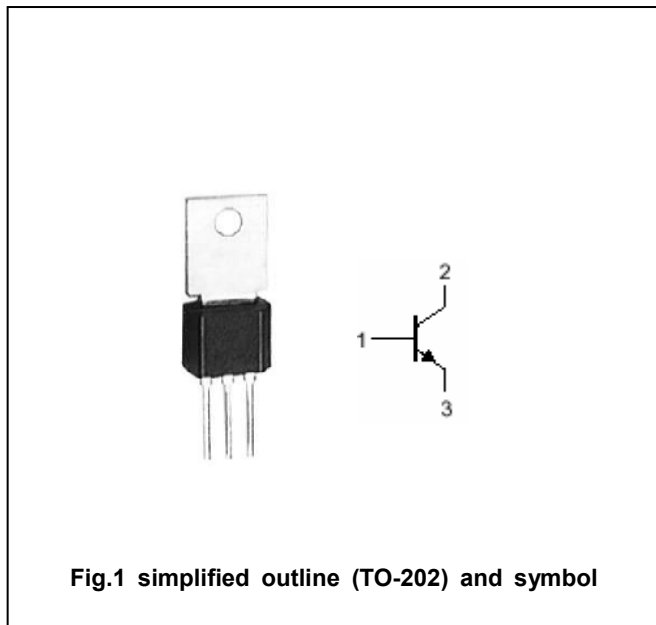


Fig.1 simplified outline (TO-202) and symbol

Absolute maximum ratings (Ta=25°C)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|----------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 250 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 250 | V |
| V _{EBO} | Emitter-base voltage | Open collector | 7 | V |
| I _C | Collector current | | 0.2 | A |
| P _C | Collector power dissipation | T _a =25°C | 1.0 | W |
| | | T _C =25°C | 10 | |
| T _j | Junction temperature | | 150 | °C |
| T _{stg} | Storage temperature | | -55~150 | °C |

Silicon NPN Power Transistors

2SC1520

CHARACTERISTICS

T_j=25 °C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|-----|------|-----|------|
| V _{CEsat} | Collector-emitter saturation voltage | I _C =50mA ; I _B =5mA | | | 2.0 | V |
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =1mA; I _B =0 | 250 | | | V |
| I _{CBO} | Collector cut-off current | V _{CB} =150V ; I _E =0 | | | 0.1 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V; I _C =0 | | | 0.1 | μA |
| h _{FE} | DC current gain | I _C =10mA ; V _{CE} =10V | 40 | | 200 | |
| C _{OB} | Output capacitance | I _E =0; V _{CB} =50V; f=1MHz | | | 4.5 | pF |
| f _T | Transition frequency | I _C =10mA ; V _{CB} =30V | | 80 | | MHz |

Silicon NPN Power Transistors

2SC1520

PACKAGE OUTLINE

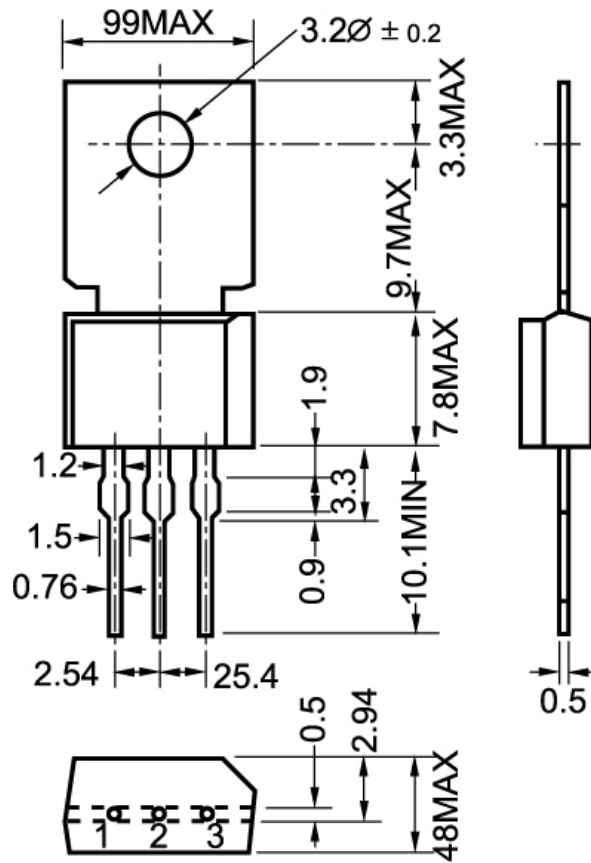


Fig.2 outline dimensions