

Silicon NPN Power Transistors

2SC1905

DESCRIPTION

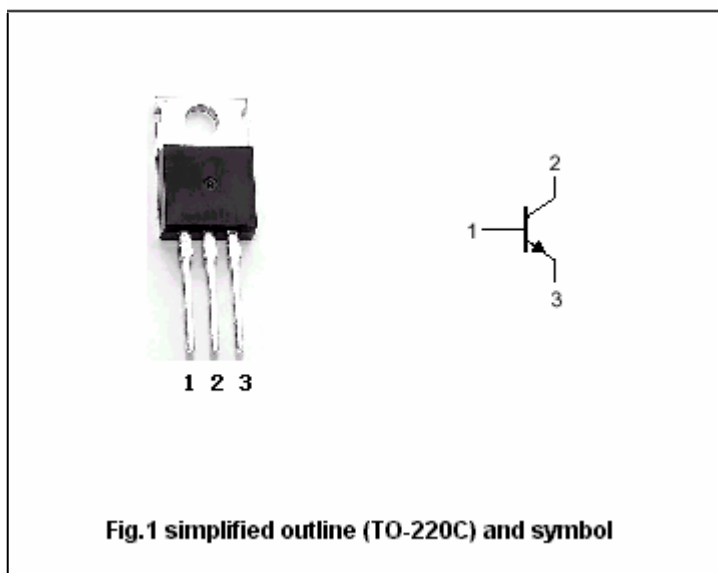
- With TO-220C package
- High breakdown voltage
- Large collector power dissipation

APPLICATIONS

- Color TV horizontal deflection driver

PINNING

| PIN | DESCRIPTION |
|-----|--------------------------------------|
| 1 | Base |
| 2 | Collector;connected to mounting base |
| 3 | Emitter |

Absolute maximum ratings($T_a=25^\circ\text{C}$)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | 350 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 300 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 7.5 | V |
| I_C | Collector current | | 200 | mA |
| I_{CM} | Collector current-peak | | 400 | mA |
| P_C | Collector power dissipation | $T_C=25$ | 15 | W |
| T_j | Junction temperature | | 150 | |
| T_{stg} | Storage temperature | | -55~150 | |

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CHARACTERISTICS

T_j=25 unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|------------------------------------------------------------------|-----|------|-----|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =5mA ; I _B =0 | 300 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =100 μ A ; I _E =0 | 350 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =100 μ A ; I _C =0 | 7.5 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =50mA; I _B =5mA | | | 1.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =200V ; I _E =0 | | | 2 | μ A |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V; I _C =0 | | | 2 | μ A |
| h _{FE} | DC current gain | I _C =10m A ; V _{CE} =10V | 40 | | 250 | |
| f _T | Transition frequency | I _C =10m A ; V _{CE} =30V | 50 | | | MHz |
| C _{OB} | Output capacitance | I _E =0 ; V _{CB} =50V; f=1MHz | | | 4.5 | pF |
| t _{stg} | Storage time | I _C =100mA; I _{B1} =10mA; I _{B2} =0 | 5 | | 7.5 | μ s |

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PACKAGE OUTLINE

