

Silicon NPN Power Transistors

2SC2965

DESCRIPTION

- With TO-3 package
- High breakdown voltage
- Fast switching speed.
- Wide area of safe operation

APPLICATIONS

- For switching regulator applications

PINNING(see Fig.2)

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

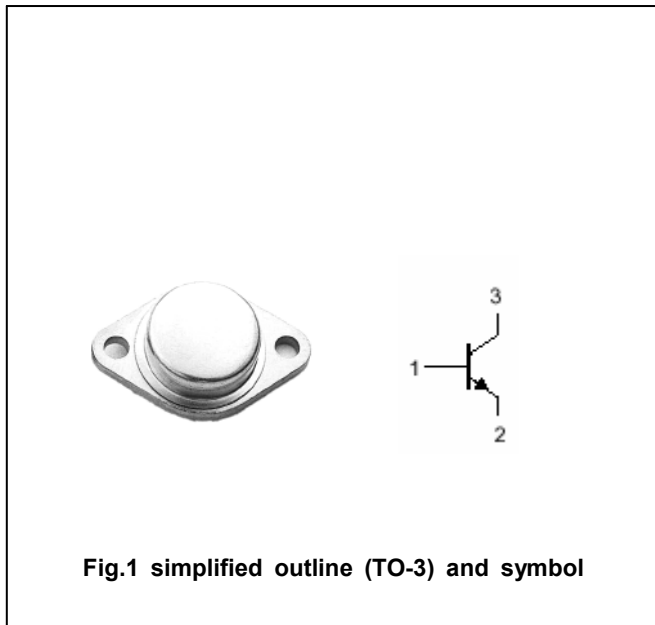


Fig.1 simplified outline (TO-3) and symbol

ABSOLUTE MAXIMUM RATINGS(T_c=25℃)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|---------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 600 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 450 | V |
| V _{EBO} | Emitter-base voltage | Open collector | 7 | V |
| I _C | Collector current | | 15 | A |
| P _C | Collector power dissipation | T _C =25℃ | 150 | W |
| T _j | Junction temperature | | 150 | ℃ |
| T _{stg} | Storage temperature | | -55~150 | ℃ |

Silicon NPN Power Transistors

2SC2965

CHARACTERISTICS

T_j=25 °C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|-----|------|-----|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =5mA ; R _{BE} =∞ | 450 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =1mA ; I _E =0 | 600 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =1mA ; I _C =0 | 7 | | | V |
| V _{CE(sat)} | Collector-emitter saturation voltage | I _C =10A; I _B =2A | | | 1.5 | V |
| V _{BE(sat)} | Base-emitter saturation voltage | I _C =10A; I _B =2A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =500V ; I _E =0 | | | 100 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V; I _C =0 | | | 100 | μA |
| h _{FE} | DC current gain | I _C =10A ; V _{CE} =5V | 7 | | 20 | |
| f _T | Transition frequency | I _C =2A ; V _{CE} =10V | | 28 | | MHz |
| C _{OB} | Collector output capacitance | I _E =0 ; V _{CB} =10V,f=1MHz | | 230 | | pF |

PACKAGE OUTLINE



Fig.2 outline dimensions (unindicated tolerance:±0.1mm)