

DESCRIPTION

- With TO-3PN package
- Respectively complement to type MJE4350/4351/4352/4353
- DC current gain $h_{FE}=8(\text{Min})@I_C=16\text{A}$

APPLICATIONS

- For use in high power audio amplifier and switching regulator circuits

PINNING

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

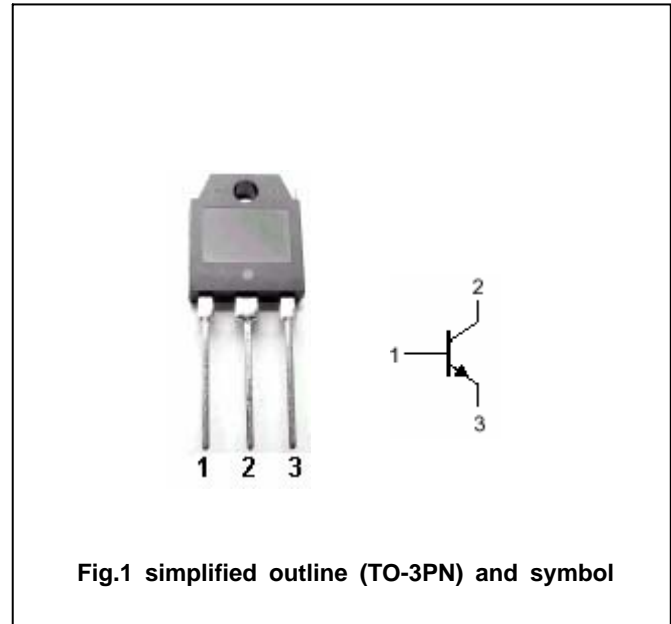


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings($T_a=$)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | MJE4340 | 100 | V |
| | | MJE4341 | 120 | |
| | | MJE4342 | 140 | |
| | | MJE4343 | 160 | |
| V_{CEO} | Collector-emitter voltage | MJE4340 | 100 | V |
| | | MJE4341 | 120 | |
| | | MJE4342 | 140 | |
| | | MJE4343 | 160 | |
| V_{EBO} | Emitter-base voltage | Open collector | 7 | V |
| I_C | Collector current | | 16 | A |
| I_{CM} | Collector current-peak | | 20 | A |
| I_B | Base current | | 5 | A |
| P_C | Collector power dissipation | $T_C=25$ | 125 | W |
| T_j | Junction temperature | | 150 | |
| T_{stg} | Storage temperature | | -65~150 | |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|-------------------------------------|-----|------|
| $R_{th\ j-c}$ | Thermal resistance junction to case | 1.0 | /W |

CHARACTERISTICS

T_j=25 unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT | |
|-----------------------|--------------------------------------|---|--|------|------------|------|----|
| V _{CEO(SUS)} | Collector-emitter sustaining voltage | MJE4340 | 100 | | | V | |
| | | MJE4341 | 120 | | | | |
| | | MJE4342 | 140 | | | | |
| | | MJE4343 | 160 | | | | |
| V _{CEsat-1} | Collector-emitter saturation voltage | I _C =8A ; I _B =0.8A | | | 2.0 | V | |
| V _{CEsat-2} | Collector-emitter saturation voltage | I _C =16A ; I _B =2.0A | | | 3.5 | V | |
| V _{BEsat} | Base-emitter saturation voltage | I _C =16A ; I _B =2.0A | | | 3.9 | V | |
| V _{BE} | Base-emitter on voltage | I _C =16A ; V _{CE} =4V | | | 3.9 | V | |
| I _{CEO} | Collector cut-off current | MJE4340 | V _{CE} =50V ; I _B =0 | | | 0.75 | mA |
| | | MJE4341 | V _{CE} =60V ; I _B =0 | | | | |
| | | MJE4342 | V _{CE} =70V ; I _B =0 | | | | |
| | | MJE4343 | V _{CE} =80V ; I _B =0 | | | | |
| I _{CEX} | Collector cut-off current | V _{CE} =RatedV _{CB0} ; V _{BE} =1.5V T _C =150 | | | 1.0 5.0 | mA | |
| I _{CB0} | Collector cut-off current | V _{CB} =RatedV _{CB} ; I _E =0 | | | 0.75 | mA | |
| I _{EBO} | Emitter cut-off current | V _{EB} =7V ; I _C =0 | | | 1.0 | mA | |
| h _{FE-1} | DC current gain | I _C =8A ; V _{CE} =2V | 15 | | | | |
| h _{FE-2} | DC current gain | I _C =16A ; V _{CE} =4V | 8 | | | | |
| C _{OB} | Output capacitance | I _E =0 ; V _{CB} =10V ; f=0.1MHz | | | 800 | pF | |
| f _T | Transition frequency | I _C =-1A ; V _{CE} =20V ; f=0.5MHz | 1.0 | | | MHz | |

PACKAGE OUTLINE

