

Silicon PNP Power Transistors

BD534/536/538

DESCRIPTION

www.datasheet4u.com

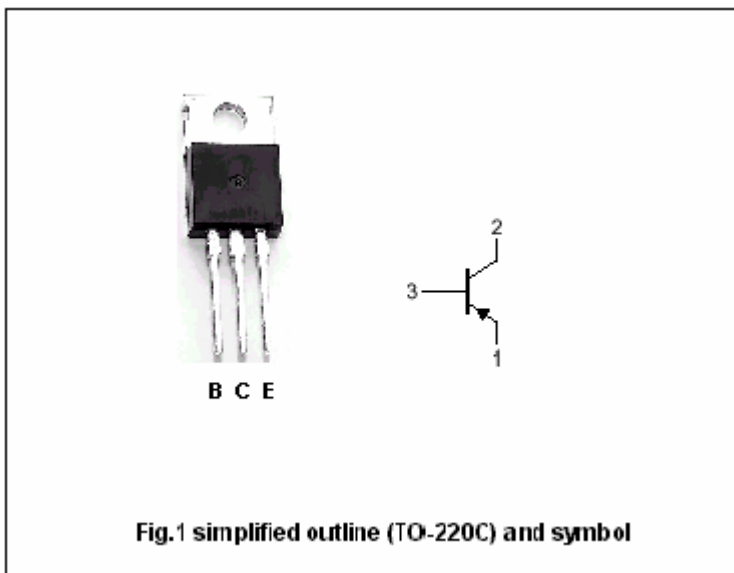
- With TO-220C package
- Complement to type BD533/535/537
- Low saturation voltage

APPLICATIONS

- For medium power linear and switching applications

PINNING

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



Absolute maximum ratings (Ta=25°C)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|----------------------|---------|------|
| V _{CBO} | Collector-base voltage | BD534 | -45 | V |
| | | BD536 | -60 | |
| | | BD538 | -80 | |
| V _{CEO} | Collector-emitter voltage | BD534 | -45 | V |
| | | BD536 | -60 | |
| | | BD538 | -80 | |
| V _{EBO} | Emitter-base voltage | Open collector | -5 | V |
| I _C | Collector current | | -8 | A |
| I _E | Emitter current | | -8 | A |
| I _B | Base current | | -1 | A |
| P _C | Collector power dissipation | T _C =25°C | 50 | W |
| T _j | Junction temperature | | 150 | °C |
| T _{stg} | Storage temperature | | -65~150 | °C |

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CHARACTERISTICS

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T_j=25 °C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT | |
|----------------------|--------------------------------------|--|--|------|------|------|---|
| V _{CEsat-1} | Collector-emitter saturation voltage | I _C =-2 A; I _B =-0.2 A | | | -0.8 | V | |
| V _{CEsat-2} | Collector-emitter saturation voltage | I _C =-6 A; I _B =-0.6 A | | -0.8 | | V | |
| V _{BE} | Base-emitter on voltage | I _C =-2A ; V _{CE} =-2V | | | -1.5 | V | |
| I _{CBO} | Collector cut-off current | BD534 | | | -0.1 | mA | |
| | | BD536 | | | | | V _{CB} =-60V; I _E =0 |
| | | BD538 | | | | | V _{CB} =-80V; I _E =0 |
| I _{CES} | Collector cut-off current | BD534 | | | -0.1 | mA | |
| | | BD536 | | | | | V _{CE} =-60V; V _{BE} =0 |
| | | BD538 | | | | | V _{CE} =-80V; V _{BE} =0 |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V; I _C =0 | | | -1 | mA | |
| h _{FE-1} | DC current gain | BD534/536 | I _C =-10mA ; V _{CE} =-5V | | | | |
| | | BD538 | | | | | 20 |
| h _{FE-2} | DC current gain | I _C =-0.5A ; V _{CE} =-2V | 40 | | | | |
| h _{FE-3} | DC current gain (All device) | Group: J | I _C =-2A ; V _{CE} =-2V | | 75 | | |
| | | Group: K | | | | | 30 |
| h _{FE-4} | DC current gain (All device) | Group: J | I _C =-3A ; V _{CE} =-2V | | | | |
| | | Group: K | | | | | 40 |
| f _T | Transition frequency | I _C =-0.5A ; V _{CE} =-1V | 3 | 12 | | MHz | |

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PACKAGE OUTLINE

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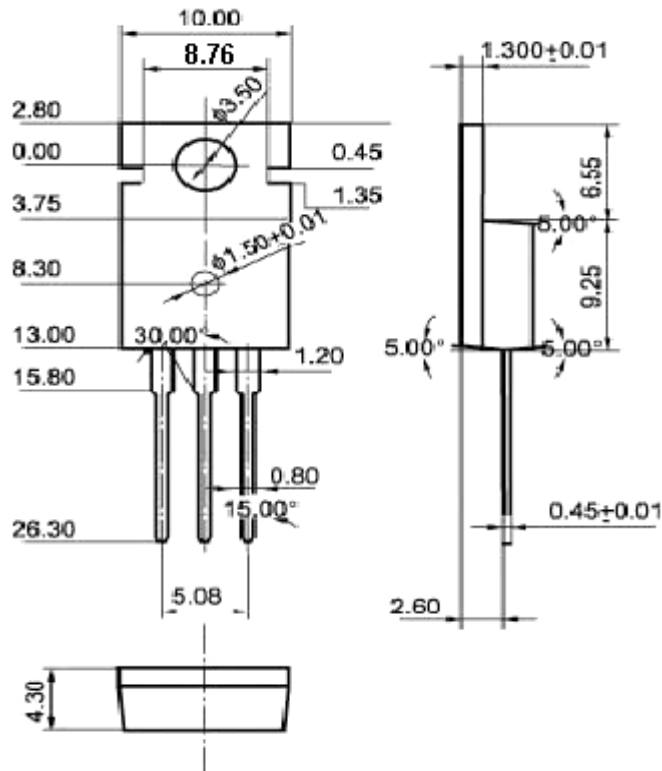


Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)