

Silicon NPN Power Transistors

2SD315

DESCRIPTION

- With TO-66 package
- Complement to type 2SB509

APPLICATIONS

- For use in audio frequency power amplifier application

PINNING(see Fig.2)

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

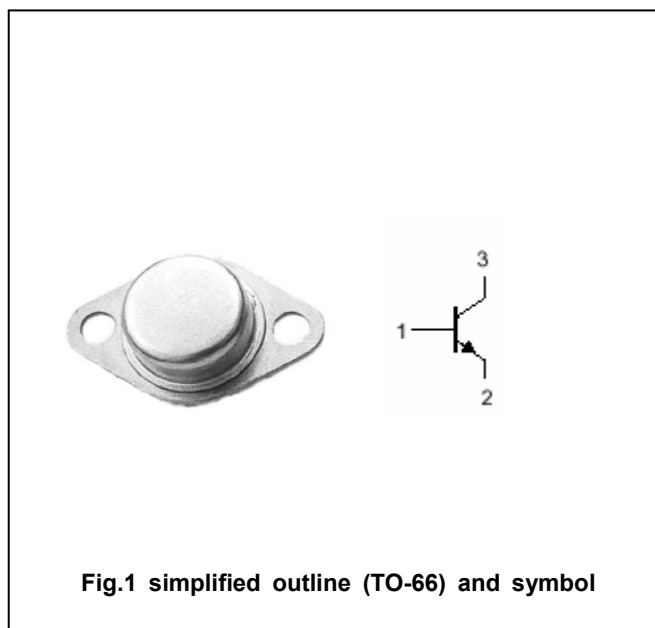


Fig.1 simplified outline (TO-66) and symbol

Absolute maximum ratings(Ta=□)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|---------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 60 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 60 | V |
| V _{EBO} | Emitter-base voltage | Open collector | 5 | V |
| I _C | Collector current | | 4 | A |
| I _{CM} | Collector current-peak | | 10 | A |
| P _C | Collector power dissipation | T _C =25□ | 35 | W |
| T _j | Junction temperature | | 150 | □ |
| T _{stg} | Storage temperature | | -40~150 | □ |

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CHARACTERISTICS

T_j=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|-----|------|-----|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =10mA; I _B =0 | 60 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =2A; I _B =0.2A | | | 1.0 | V |
| V _{BE} | Base-emitter on voltage | I _C =1A; V _{CE} =2V | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =20V; I _E =0 | | | 0.1 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =4V; I _C =0 | | | 1.0 | mA |
| h _{FE-1} | DC current gain | I _C =1A; V _{CE} =2V | 40 | | 320 | |
| h _{FE-2} | DC current gain | I _C =0.1A; V _{CE} =2V | 40 | | | |
| f _T | Transition frequency | I _C =0.5A; V _{CE} =5V | | 8 | | MHz |

◆ h_{FE-1} Classifications

| C | D | E | F |
|-------|--------|---------|---------|
| 40-80 | 60-120 | 100-200 | 160-320 |

PACKAGE OUTLINE



Fig.2 outline dimensions