

Silicon NPN Power Transistors

2SD526

DESCRIPTION

www.datasheet4u.com

- With TO-220C package
- Complement to type 2SB596
- Good linearity of h_{FE}

APPLICATIONS

- Power amplifier applications
- Recommend for 20~25W high fidelity audio frequency amplifier output stage

PINNING

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

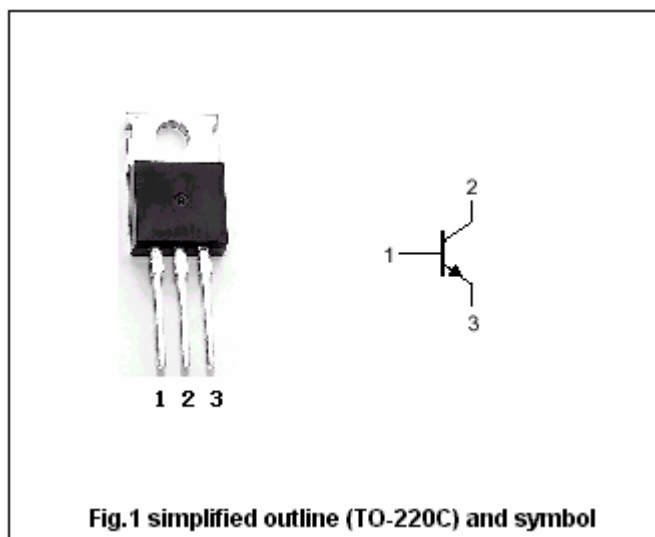


Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings(Ta=25°C)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|------------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | 80 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 80 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 5 | V |
| I_C | Collector current | | 4 | A |
| I_B | Base current | | 0.4 | A |
| P_C | Collector power dissipation | $T_C=25^\circ C$ | 30 | W |
| T_j | Junction temperature | | 150 | °C |
| T_{stg} | Storage temperature | | -55~150 | °C |

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CHARACTERISTICS

T_j=25°C unless otherwise specified

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| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|-----|------|-----|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =50mA; I _B =0 | 80 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =3 A; I _B =0.3 A | | | 1.5 | V |
| V _{BE} | Base-emitter voltage | I _C =3A ; V _{CE} =5V | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =80V ; I _E =0 | | | 30 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V; I _C =0 | | | 100 | μA |
| h _{FE-1} | DC current gain | I _C =0.5A ; V _{CE} =5V | 40 | | 240 | |
| h _{FE-2} | DC current gain | I _C =3A ; V _{CE} =5V | 15 | | | |
| f _T | Transition frequency | I _C =0.5A ; V _{CE} =5V | | 8 | | MHz |
| C _{OB} | Output capacitance | I _E =0; V _{CB} =10V; f=1MHz | | 90 | | pF |

◆ h_{FE-1} classifications

| R | O | Y |
|-------|--------|---------|
| 40-80 | 70-140 | 120-240 |

PACKAGE OUTLINE

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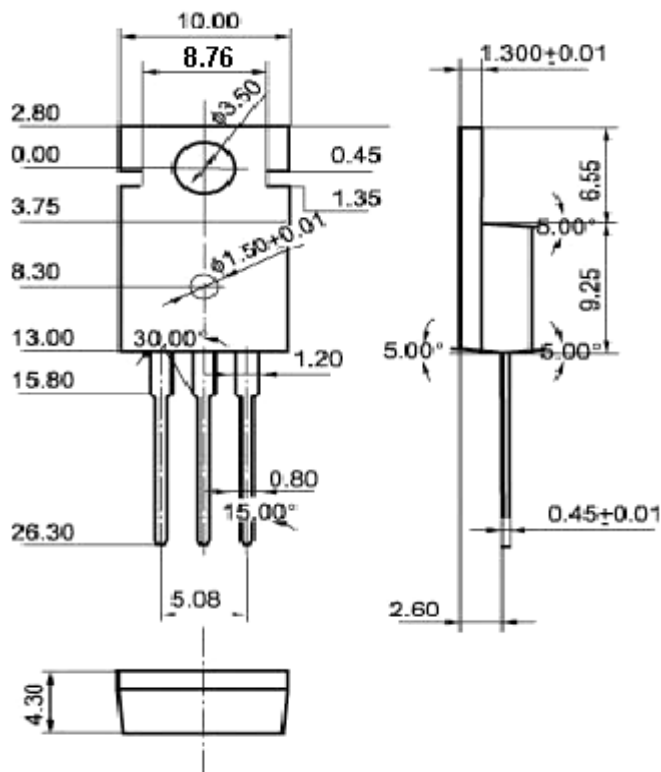


Fig.2 Outline dimensions (unindicated tolerance:±0.10 mm)

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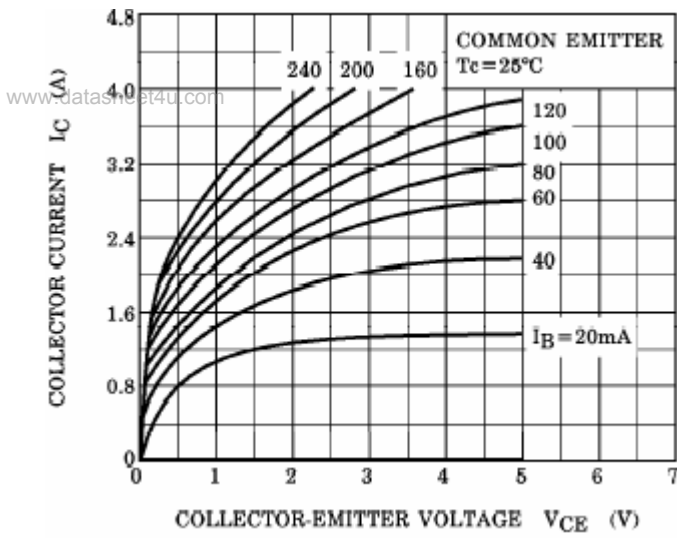


Fig.3 Static Characteristic

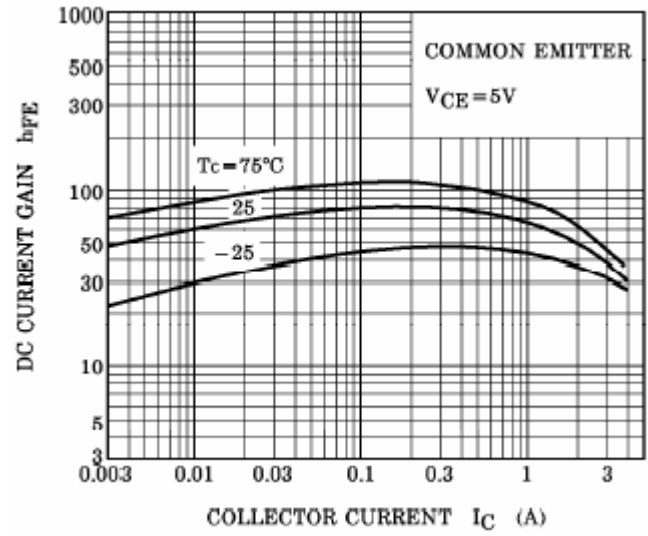


Fig.4 DC current Gain

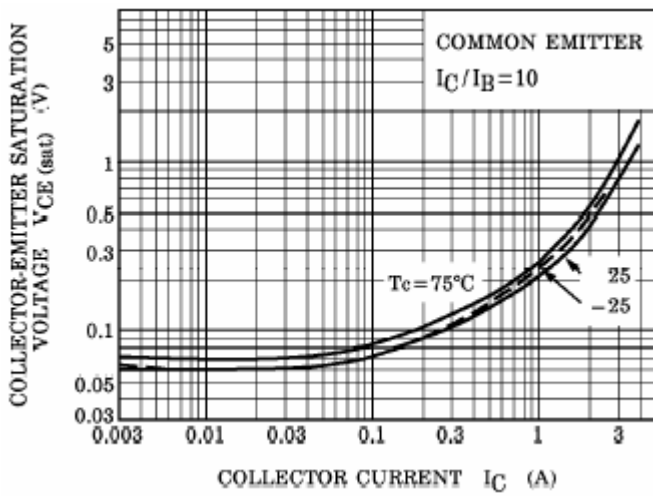


Fig.5 Collector-Emitter Saturation Voltage

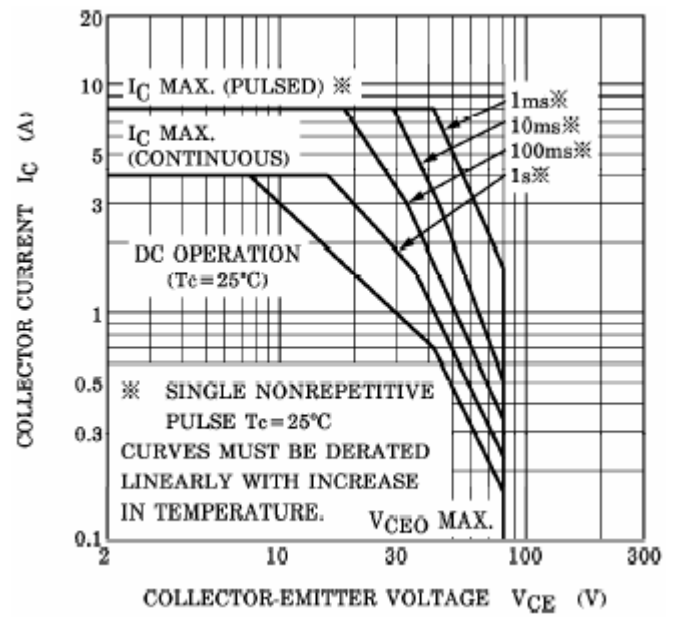


Fig.6 Safe Operating Area