

Silicon PNP Power Transistors

2SB1274

DESCRIPTION

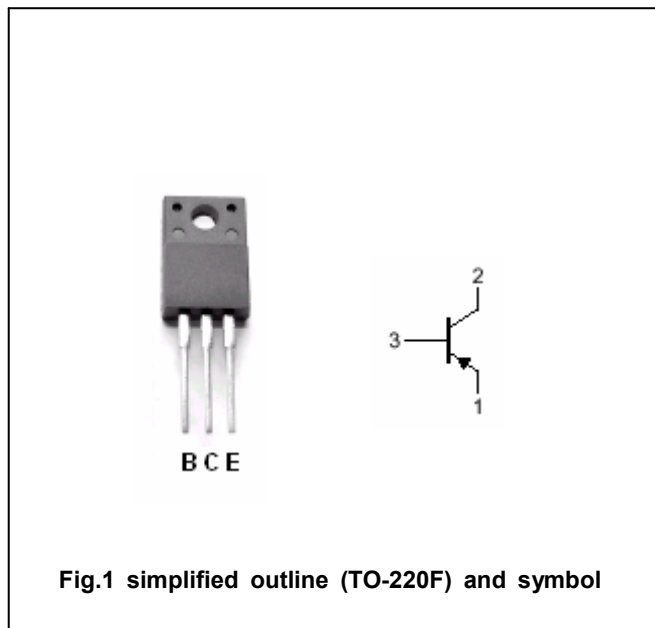
- With TO-220F package
- Complement to type 2SD1913
- High reliability.
- High breakdown voltage
- Low saturation voltage.
- Wide area of safe operation

APPLICATIONS

- 60V/3A low-frequency power amplifier
- General power amplifier applications

PINNING

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



Absolute maximum ratings (Ta=25°C)

| 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 | -6 | V |
| I _C | Collector current | | -3 | A |
| I _{CM} | Collector current-peak | | -8 | A |
| P _C | Collector dissipation | T _C =25°C | 20 | W |
| | | | 2 | |
| 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

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|--|-----|------|------|------|
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =-1mA; I _E =0 | -60 | | | V |
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =-5mA; R _{BE} =∞ | -60 | | | V |
| V _{(BR)EBO} | Base-emitter breakdown voltage | I _E =-1mA; I _C =0 | -6 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =-2A; I _B =-0.2A | | -0.4 | -1.0 | V |
| V _{BE} | Base-emitter voltage | I _C =-0.5A; V _{CE} =-5V | | -0.8 | -1.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-40V; I _E =0 | | | -0.1 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =-4V; I _C =0 | | | -0.1 | mA |
| h _{FE-1} | DC current gain | I _C =-0.5A; V _{CE} =-5V | 70 | | 280 | |
| h _{FE-2} | DC current gain | I _C =-3A; V _{CE} =-5V | 20 | | | |
| f _T | Transition frequency | I _C =-0.5A; V _{CE} =-5V | | 100 | | MHz |
| C _{OB} | Output capacitance | I _E =0; V _{CB} =-10V; f=1MHz | | 60 | | pF |

◆ h_{FE-1} classifications

| Q | R | S |
|--------|---------|---------|
| 70-140 | 100-200 | 140-280 |

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PACKAGE OUTLINE

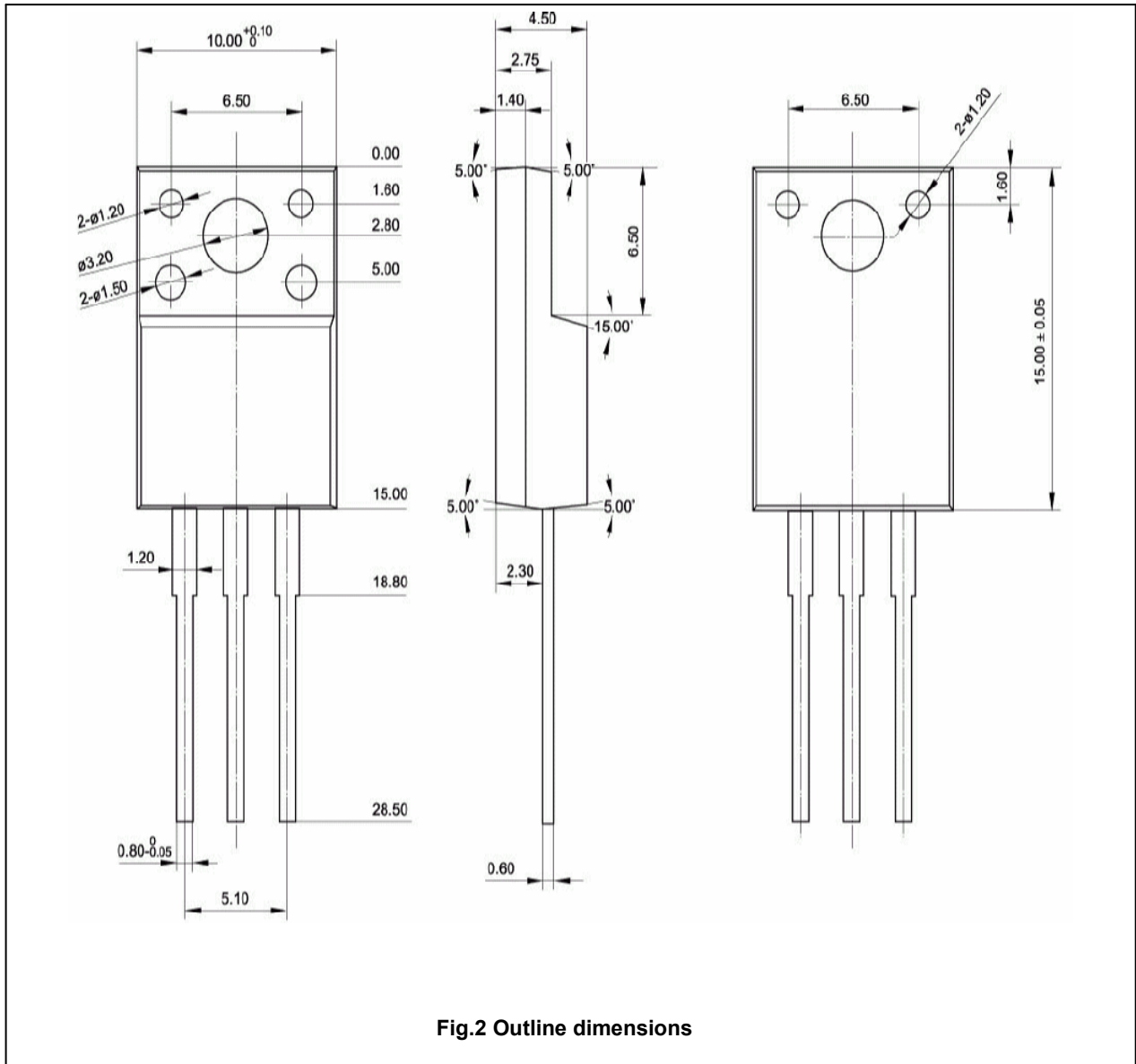


Fig.2 Outline dimensions

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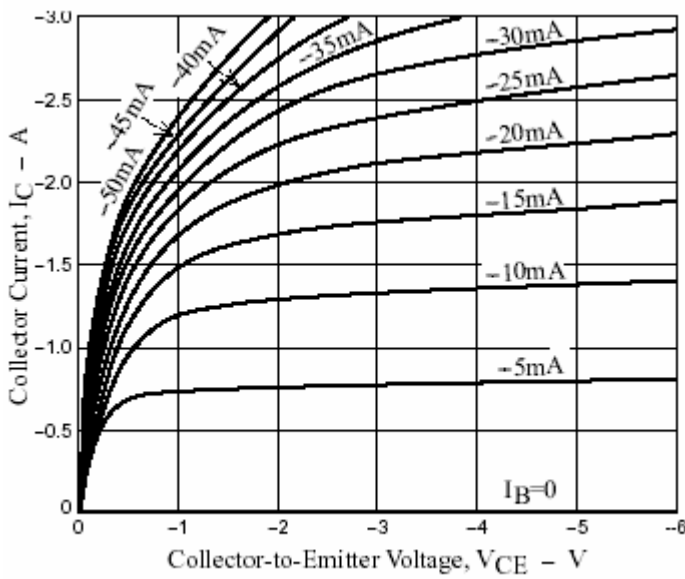


Fig.3 Static Characteristic

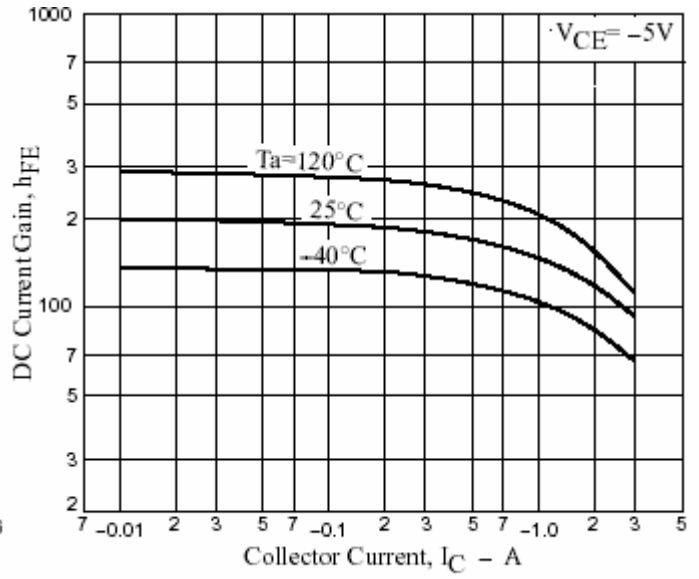


Fig.4 DC current Gain

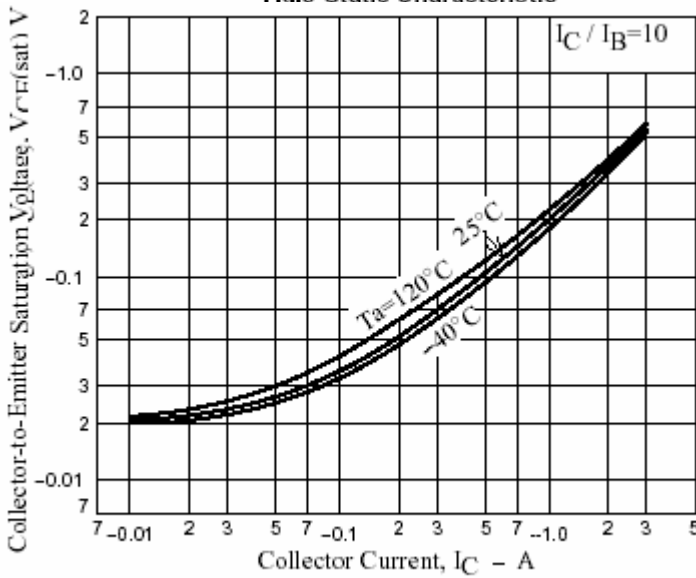


Fig.5 Collector-Emitter Saturation Voltage

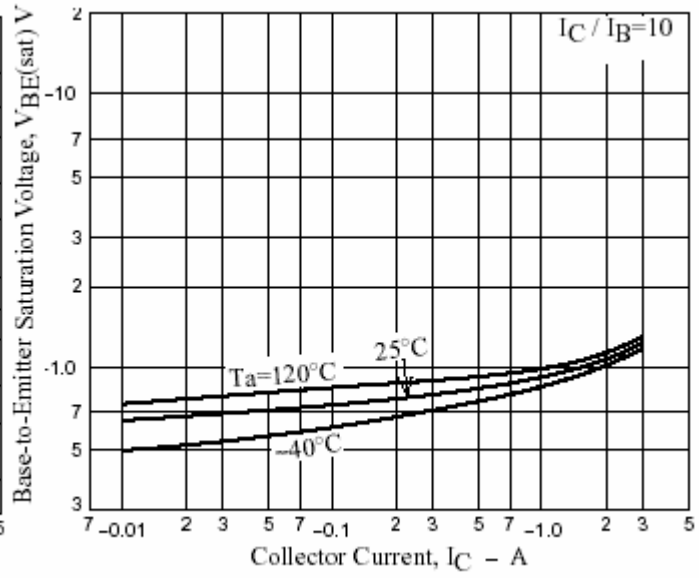


Fig.6 Base-Emitter Saturation Voltage

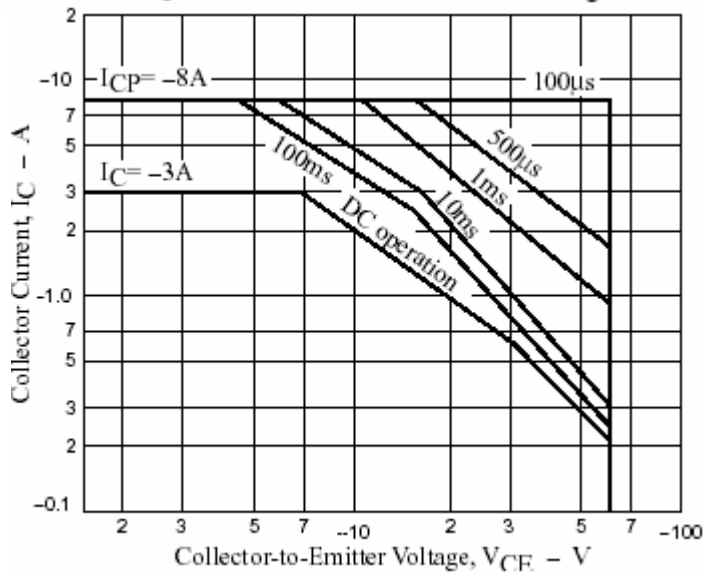


Fig.7 Safe Operating Area