

Silicon PNP Power Transistors

2SA1658

DESCRIPTION

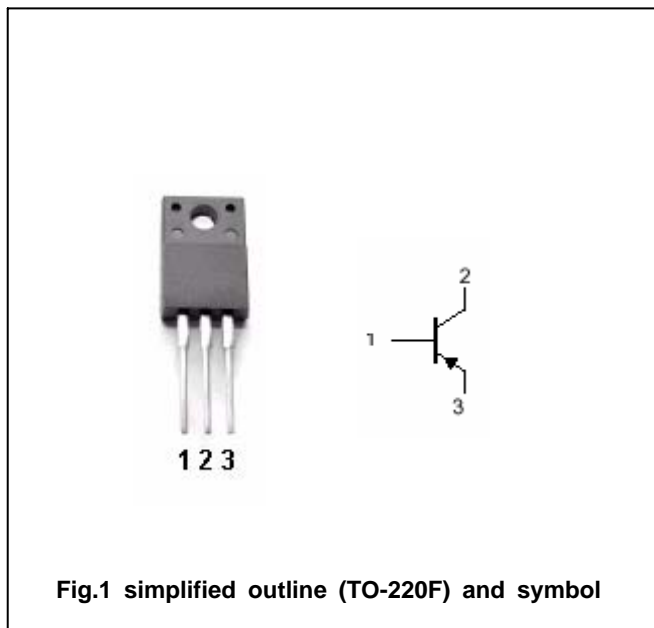
- With TO-220F package
- Complement to type 2SC4369
- Good linearity of h_{FE}

APPLICATIONS

- For general purpose applications

PINNING

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



Absolute maximum ratings (Ta=25)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|---------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | -30 | V |
| V_{CEO} | Collector-emitter voltage | Open base | -30 | V |
| V_{EBO} | Emitter-base voltage | Open collector | -5 | V |
| I_C | Collector current | | -3 | A |
| I_B | Base current | | -0.3 | A |
| P_C | Collector dissipation | $T_C=25$ | 15 | W |
| T_j | Junction temperature | | 150 | |
| T_{stg} | Storage temperature | | -55~150 | |

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CHARACTERISTICS

T_j=25 unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|--|-----|-------|------|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =-10mA ; I _B =0 | -30 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =-2A ; I _B =-0.2A | | -0.3 | -0.8 | V |
| V _{BE} | Base-emitter on voltage | I _C =-0.5A ; V _{CE} =-2V | | -0.75 | -1.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-20V ; I _E =0 | | | -1.0 | μ A |
| I _{EBO} | Emitter cut-off current | V _{EB} =-5V ; I _C =0 | | | -1.0 | μ A |
| h _{FE-1} | DC current gain | I _C =-0.5A ; V _{CE} =-2V | 70 | | 240 | |
| h _{FE-2} | DC current gain | I _C =-2.5A ; V _{CE} =-2V | 25 | | | |
| C _{OB} | Output capacitance | I _E =0 ; V _{CB} =-10V ; f=1MHz | | 40 | | pF |
| f _T | Transition frequency | I _C =-0.5A ; V _{CE} =-2V | | 100 | | MHz |

◆ h_{FE-1} Classifications

| O | Y |
|--------|---------|
| 70-140 | 120-240 |

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PACKAGE OUTLINE

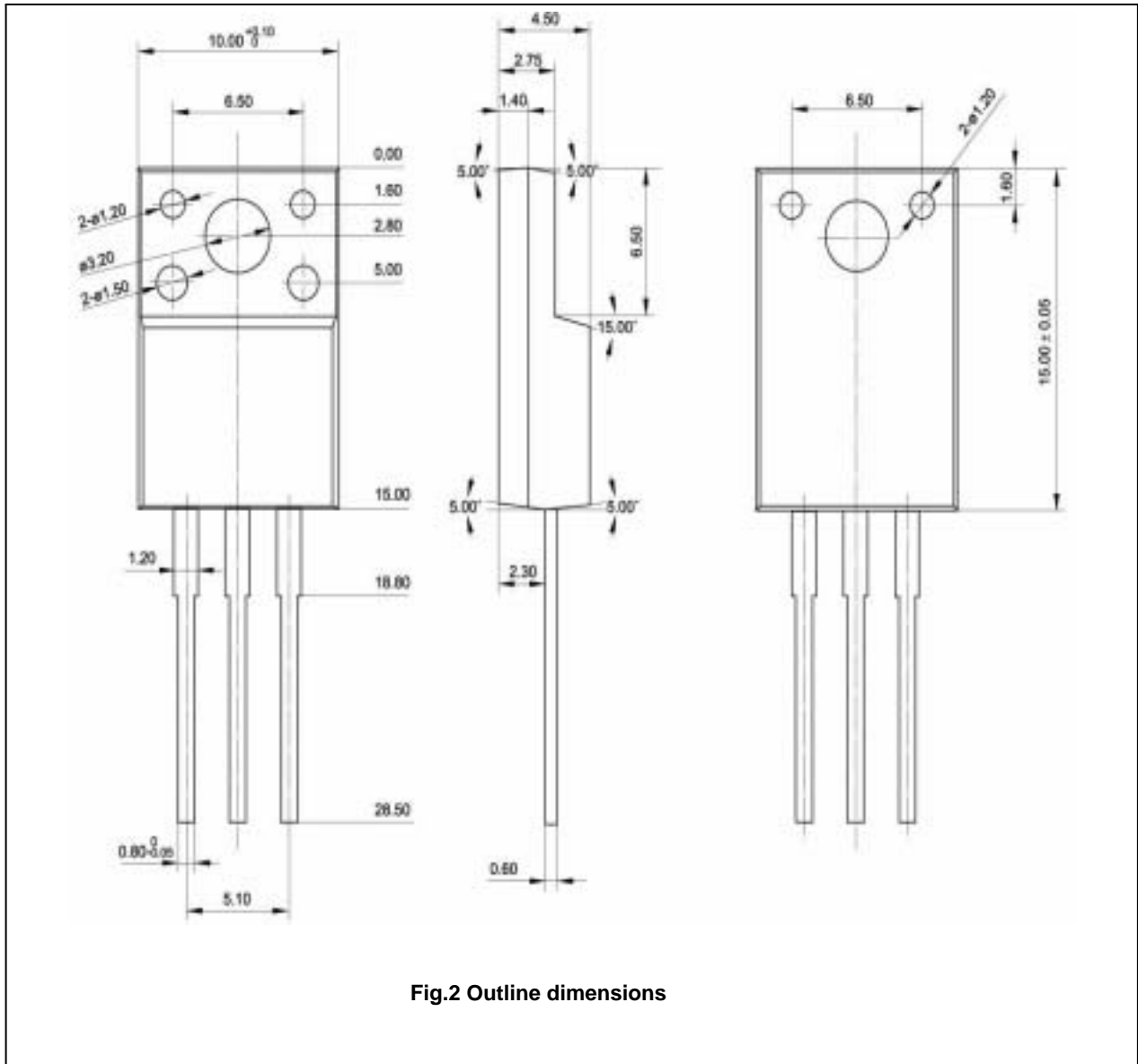


Fig.2 Outline dimensions