

Silicon PNP Darlington Power Transistors

2SB1626

DESCRIPTION

- With TO-220F package
- Complement to type 2SD2495

APPLICATIONS

- For audio, series regulator and general purpose applications

PINNING

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

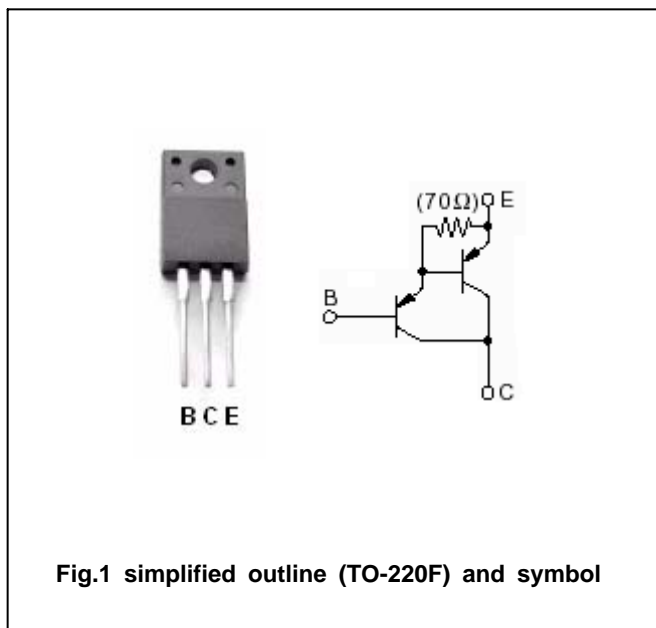


Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings (Ta=25)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|---------------------------|--------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | -110 | V |
| V _{CEO} | Collector-emitter voltage | Open base | -110 | V |
| V _{EBO} | Emitter-base voltage | Open collector | -5 | V |
| I _C | Collector current | | -6 | A |
| I _B | Base current | | -1 | A |
| P _C | Collector dissipation | T _C =25 | 30 | 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 =-50mA ; I _B =0 | -110 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =-5A; I _B =-5mA | | | -2.5 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =-5A; I _B =-5mA | | | -3.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-110V; I _E =0 | | | -0.1 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =-5V; I _C =0 | | | -0.1 | mA |
| h _{FE} | DC current gain | I _C =-5A ; V _{CE} =-4V | 5000 | | | |
| f _T | Transition frequency | I _C =-0.5A ; V _{CE} =-12V | | 100 | | MHz |
| C _{OB} | Collector output capacitance | f=1MHz; V _{CB} =-10V | | 110 | | pF |

Switching times

| | | | | | | |
|-----------------|--------------|--|--|-----|--|----|
| t _{on} | Turn-on time | I _C =-5A I _{B1} =-I _{B2} =-5mA V _{CC} =30V ,R _L =6 | | 1.1 | | μs |
| t _s | Storage time | | | 3.2 | | μs |
| t _f | Fall time | | | 1.1 | | μs |

◆ h_{FE} Classifications

| O | p | Y |
|------------|------------|-------------|
| 5000-12000 | 6500-20000 | 15000-30000 |

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PACKAGE OUTLINE

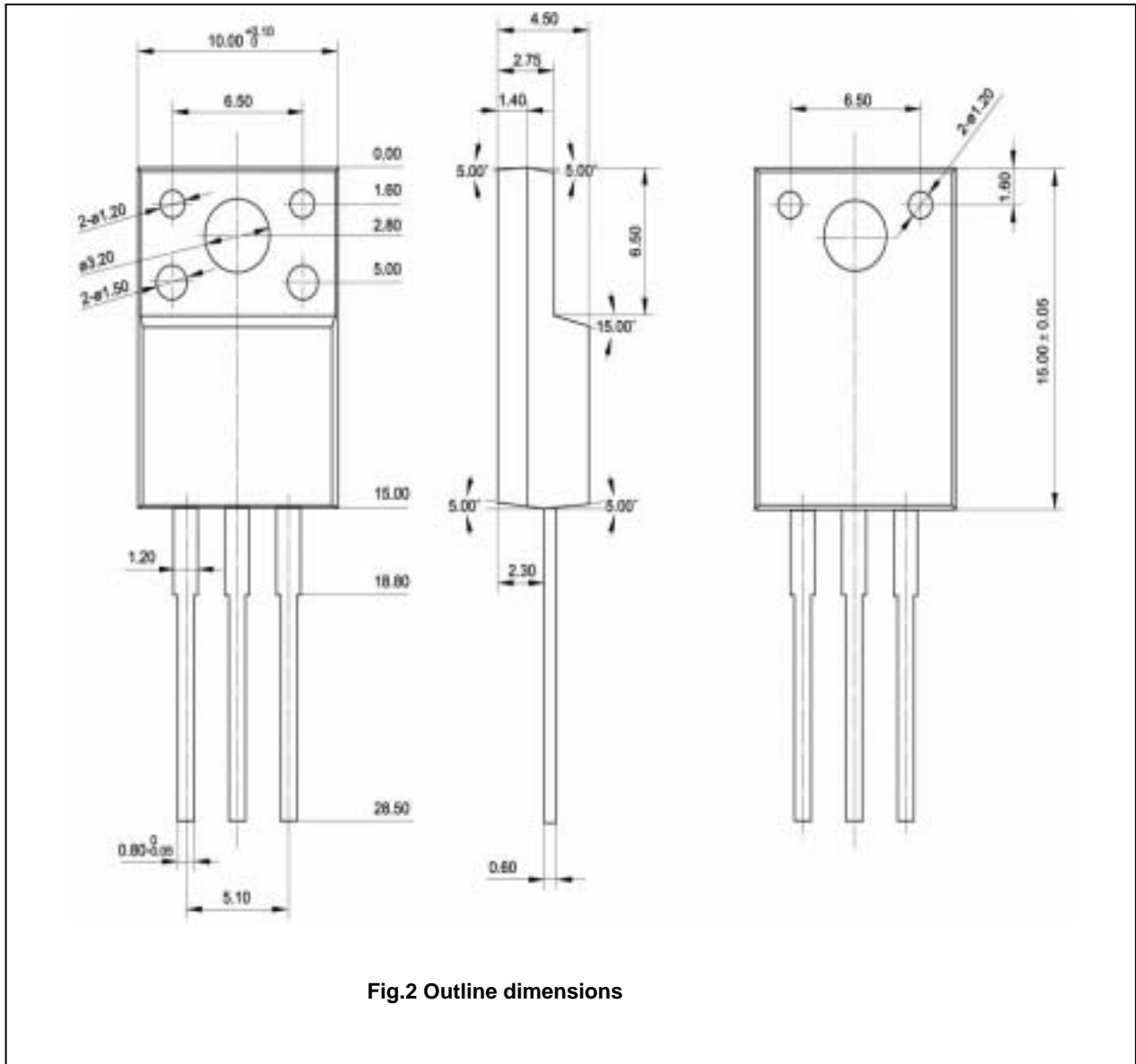


Fig.2 Outline dimensions