

Silicon NPN Power Transistors

2SC3949

DESCRIPTION

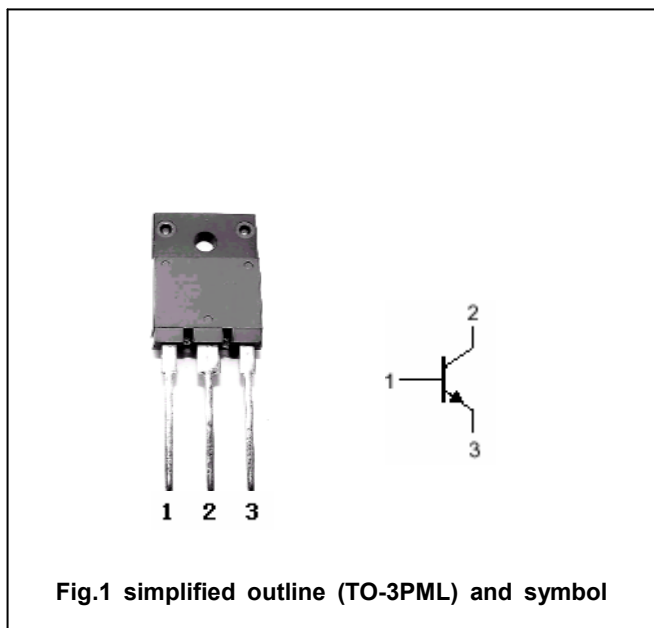
- With TO-3PML package
- High voltage ,high speed

APPLICATIONS

- For TV horizontal output and power switching applications

PINNING

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



Absolute maximum ratings (Ta=25°C)

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|------------------|---------------------------|----------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 850 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 500 | V |
| V _{EBO} | Emitter-base voltage | Open collector | 7 | V |
| I _C | Collector current | | 15 | A |
| P _C | Collector dissipation | T _C =25°C | 80 | 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

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|--|-----|------|------------|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =10mA ; R _{BE} =∞ | 500 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =1mA ; I _E =0 | 850 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =1mA ; I _C =0 | 7 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =10A ; I _B =2A | | | 1.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =10A ; I _B =2A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CE} =800V ; I _E =0 T _C =100°C | | | 0.1 1.0 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =6V ; I _C =0 | | | 0.1 | mA |
| h _{FE} | DC current gain | I _C =10A ; V _{CE} =5V | 10 | | 30 | |
| f _T | Transition frequency | I _C =2A ; V _{CE} =10V | | 20 | | MHz |
| C _{OB} | Output capacitance | I _E =0 ; V _{CB} =10V ; f=1MHz | | 260 | | pF |

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PACKAGE OUTLINE

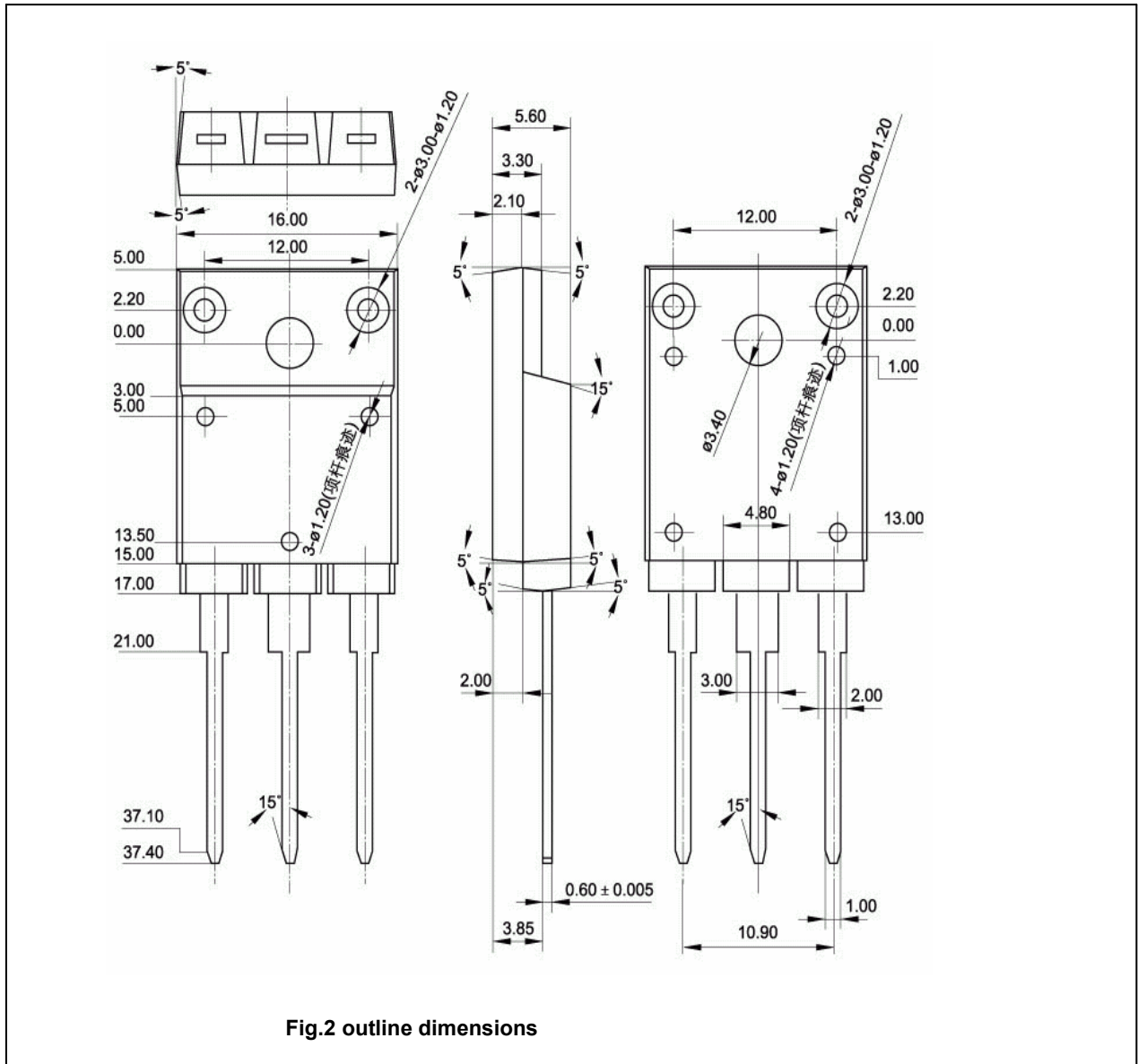


Fig.2 outline dimensions