

Silicon PNP Power Transistors**2SA1129****DESCRIPTION**

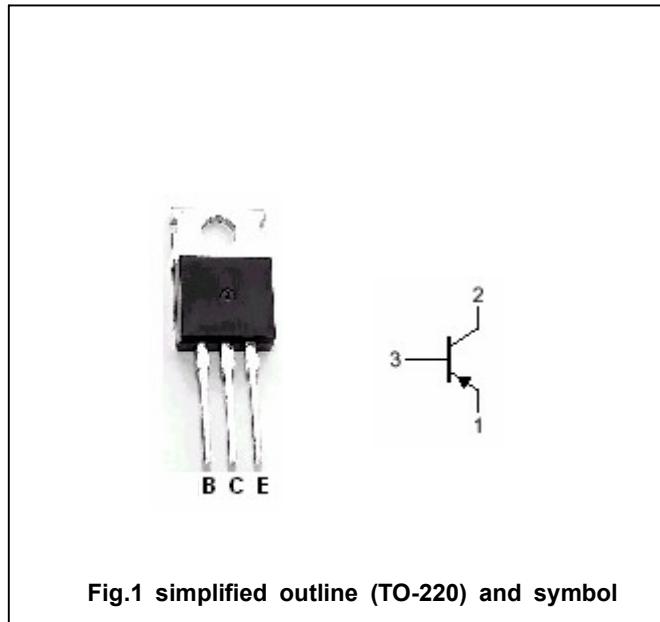
- With TO-220 package
- Low collector saturation voltage
- Large current capacity
- Complement to type 2SC2654

APPLICATIONS

- For low-frequency power amplifiers and mid-speed switching applications

PINNING

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

**Absolute maximum ratings(Ta=25°C)**

| 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 | -7 | V |
| I _C | Collector current | | -7 | A |
| I _{CM} | Collector current-peak | | -15 | A |
| I _B | Base current | | -3.5 | A |
| P _T | Collector power dissipation | T _C =25°C | 40 | W |
| | | T _a =25°C | 1.5 | |
| T _j | Junction temperature | | 150 | °C |
| T _{stg} | Storage temperature | | -55~150 | °C |

Silicon PNP Power Transistors**2SA1129****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, I _B =0 | -30 | | | V |
| V _{CEsat-1} | Collector-emitter saturation voltage | I _C =-3A; I _B =-0.1A | | | -0.3 | V |
| V _{CEsat-2} | Collector-emitter saturation voltage | I _C =-5A; I _B =-0.5A | | | -0.6 | V |
| V _{BEsat-1} | Base-emitter saturation voltage | I _C =-3A; I _B =-0.1A | | | -1.5 | V |
| V _{BEsat-2} | Base-emitter saturation voltage | I _C =-5A; I _B =-0.5A | | | -2.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-30V; I _E =0 | | | -10 | μ A |
| I _{EBO} | Emitter cut-off current | V _{EB} =-5V; I _C =0 | | | -10 | μ A |
| h _{FE-1} | DC current gain | I _C =-3A; V _{CE} =-1V | 40 | | 200 | |
| h _{FE-2} | DC current gain | I _C =-5A; V _{CE} =-1V | 20 | | | |

Switching times resistive load

| | | | | | | |
|------------------|--------------|---|--|--|-----|-----|
| t _{on} | Turn-on time | I _C =-5.0A I _{B1} =- I _{B2} =-0.5A R _L =4 Ω ; V _{CC} =-20V | | | 1.0 | μ s |
| t _{stg} | Storage time | | | | 2.5 | μ s |
| t _f | Fall time | | | | 1.0 | μ s |

 h_{FE-1} Classifications

| M | L | K |
|-------|--------|---------|
| 40-80 | 60-120 | 100-200 |

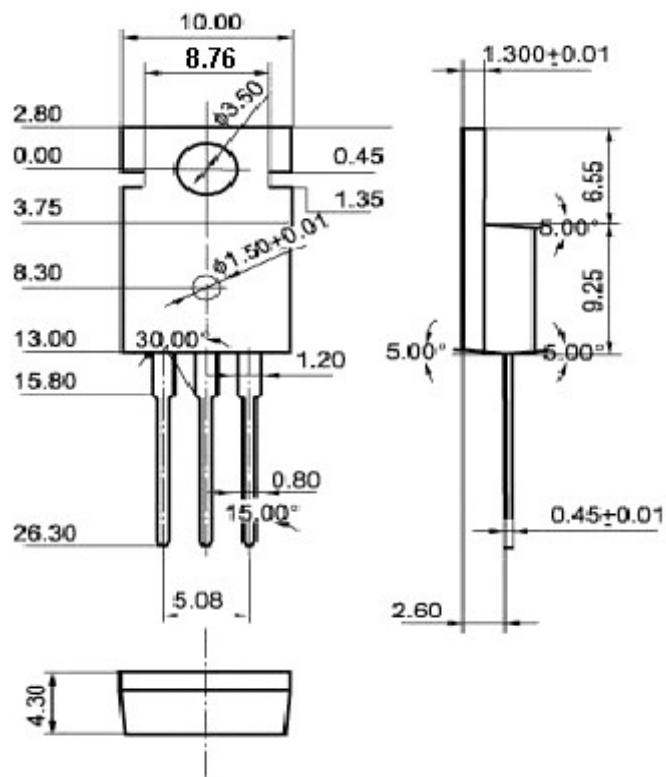
Silicon PNP Power Transistors**2SA1129****PACKAGE OUTLINE**

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

