

Silicon NPN Power Transistors

2SD1265 2SD1265A

DESCRIPTION

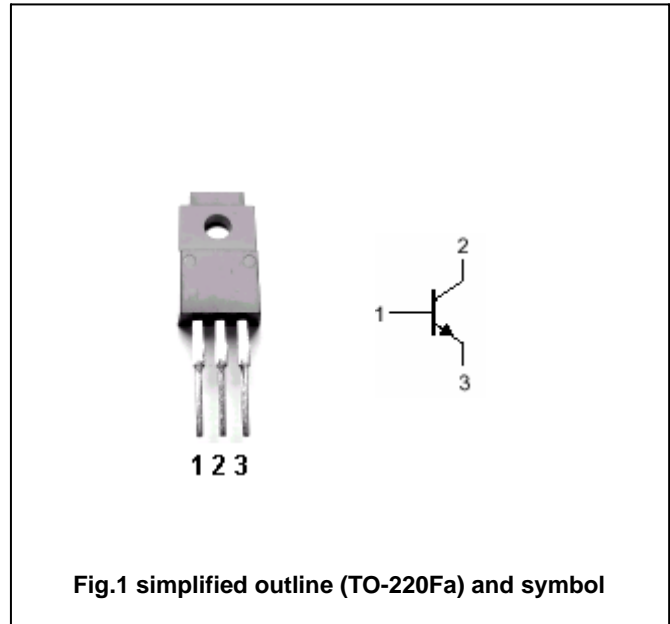
- With TO-220Fa package
- Low collector saturation voltage
- Wide area of safe operation

APPLICATIONS

- For audio frequency power applications

PINNING

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

Absolute maximum ratings($T_a=25^\circ\text{C}$)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|------------------------|---------|------------------|
| V_{CBO} | Collector-base voltage | 2SD1265 | 60 | V |
| | | 2SD1265A | 80 | |
| V_{CEO} | Collector-emitter voltage | 2SD1265 | 60 | V |
| | | 2SD1265A | 80 | |
| V_{EBO} | Emitter-base voltage | Open collector | 8 | V |
| I_C | Collector current (DC) | | 4 | A |
| I_{CM} | Collector current-peak | | 6 | A |
| I_B | Base current | | 1 | A |
| P_C | Collector power dissipation | $T_C=25^\circ\text{C}$ | 30 | W |
| | | $T_a=25^\circ\text{C}$ | 2 | |
| T_j | Junction temperature | | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage temperature | | -55~150 | $^\circ\text{C}$ |

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CHARACTERISTICS

T_j=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT | |
|-----------------------|--------------------------------------|---|------------------------------|------|-----|------|---|
| V _{CEO(SUS)} | Collector-emitter sustaining voltage | 2SD1265 | I _C =0.2A, L=25mH | 60 | | | V |
| | | 2SD1265A | | 80 | | | |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =2A; I _B =0.4A | | | 1.0 | V | |
| V _{BE} | Base-emitter on voltage | I _C =1A; V _{CE} =3V | | | 1.2 | V | |
| I _{CBO} | Collector cut-off current | V _{CB} =20V; I _E =0 | | | 30 | μ A | |
| I _{EBO} | Emitter cut-off current | V _{EB} =8V; I _C =0 | | | 1 | mA | |
| h _{FE-1} | DC current gain | I _C =0.1A; V _{CE} =3V | 40 | | | | |
| h _{FE-2} | DC current gain | I _C =1A; V _{CE} =3V | 30 | | 160 | | |

◆ h_{FE-2} Classifications

| Q | P | O |
|-------|---------|--------|
| 30-60 | 500-100 | 80-160 |

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PACKAGE OUTLINE

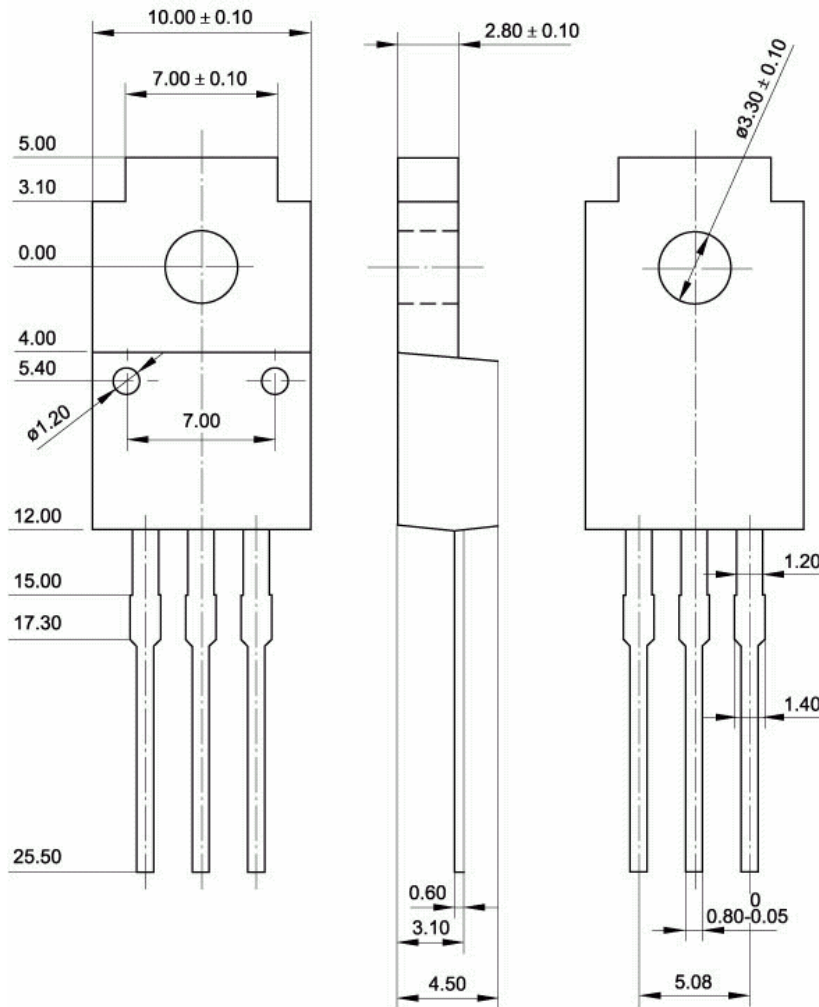


Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)