

Silicon NPN Power Transistors

2SD362

DESCRIPTION

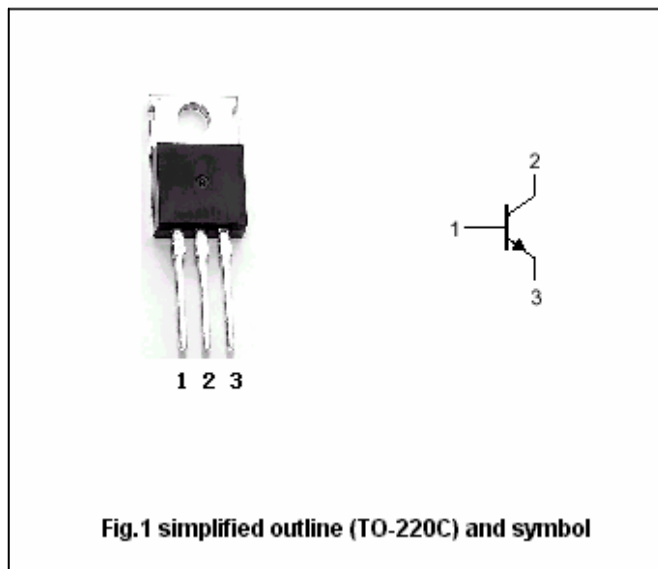
- With TO-220C package
- Collector-base voltage: $V_{CBO}=150V$
- Collector current : $I_C=5A$
- Collector dissipation : $P_C=40 (T_C=25^\circ C)$

APPLICATIONS

- For B/W TV horizontal deflection output applications

PINNING

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



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

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|---------------------------|------------------|---------|------------|
| V_{CBO} | Collector-base voltage | Open emitter | 150 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 70 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 8 | V |
| I_C | Collector current (DC) | | 5 | A |
| P_C | Collector dissipation | $T_C=25^\circ C$ | 40 | W |
| T_j | Junction temperature | | 150 | $^\circ C$ |
| T_{stg} | Storage temperature | | -55~150 | $^\circ C$ |

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CHARACTERISTICS

T_j=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|-------------------------------------------|-----|------|-----|------|
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =1mA; I _E =0 | 150 | | | V |
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =2mA; R _{BE} =∞ | 70 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =1mA; I _C =0 | 8 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =5A; I _B =0.5A | | | 1.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =5A; I _B =0.5A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =100V; I _E =0 | | | 20 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V; I _C =0 | | | 20 | μA |
| h _{FE} | DC current gain | I _C =5A; V _{CE} =5V | 20 | | 140 | |
| f _T | Transition frequency | I _C =0.5A; V _{CE} =5V | | 10 | | MHz |

◆ h_{FE} classifications

| N | R | O |
|-------|-------|--------|
| 20-50 | 40-80 | 70-140 |

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PACKAGE OUTLINE



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

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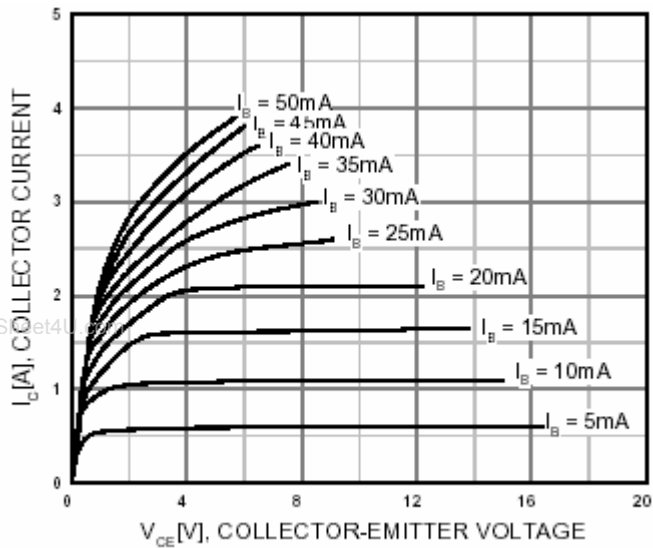


Fig.3 Static Characteristic

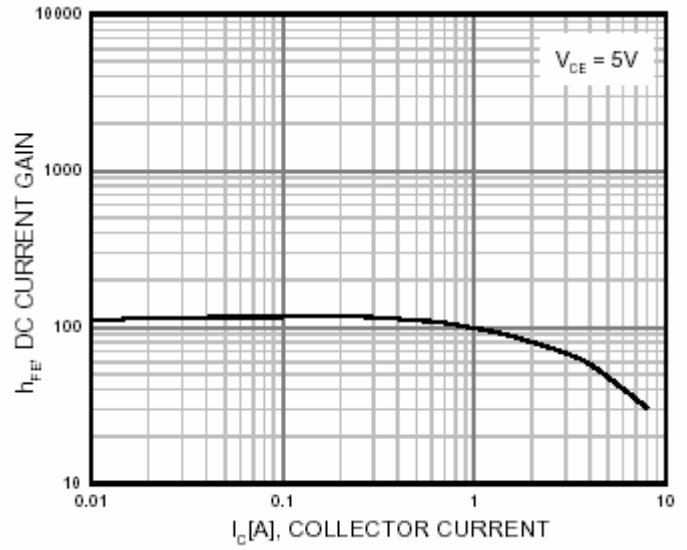


Fig.4 DC current Gain

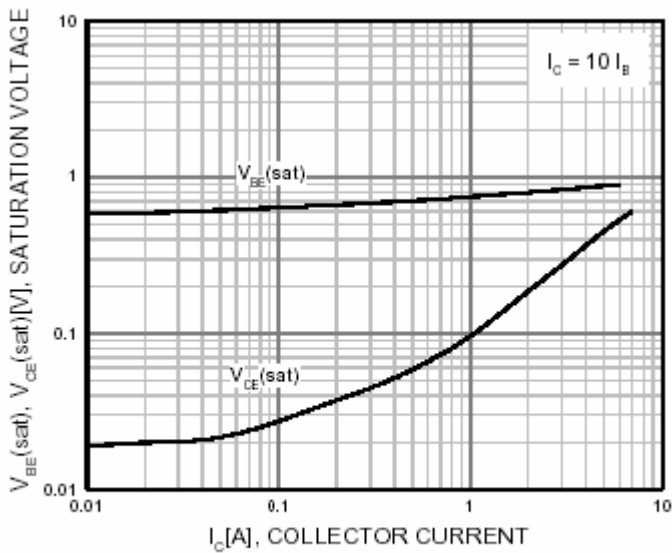


Fig.5 Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

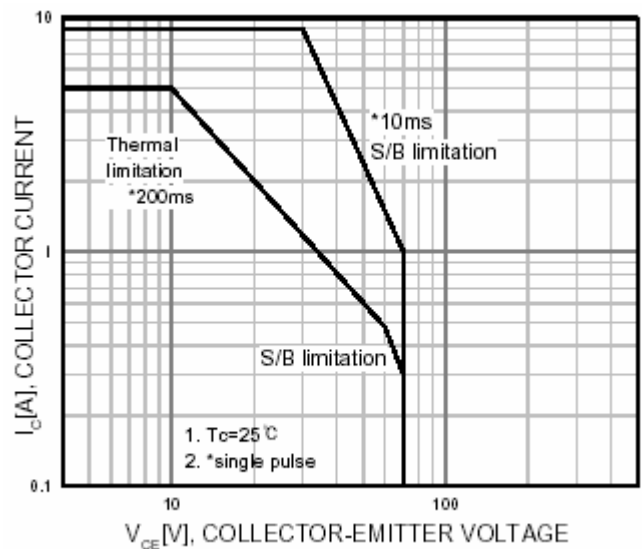


Fig.6 Safe Operating Area