

Silicon NPN Power Transistors

2SD362

DESCRIPTION

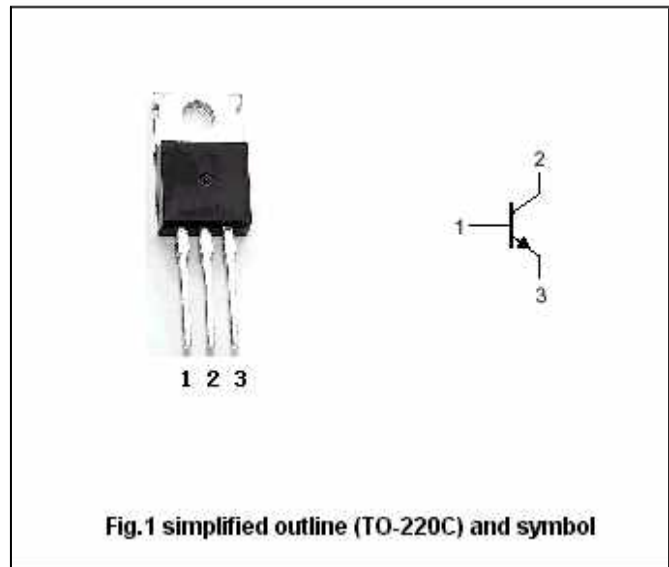
- With TO-220C package
- Collector-base voltage: $V_{CBO}=150V$
- Collector current : $I_C=5A$
- Collector dissipation : $P_C=40$ ($T_C=25^{\circ}C$)

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	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			20	μ A
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

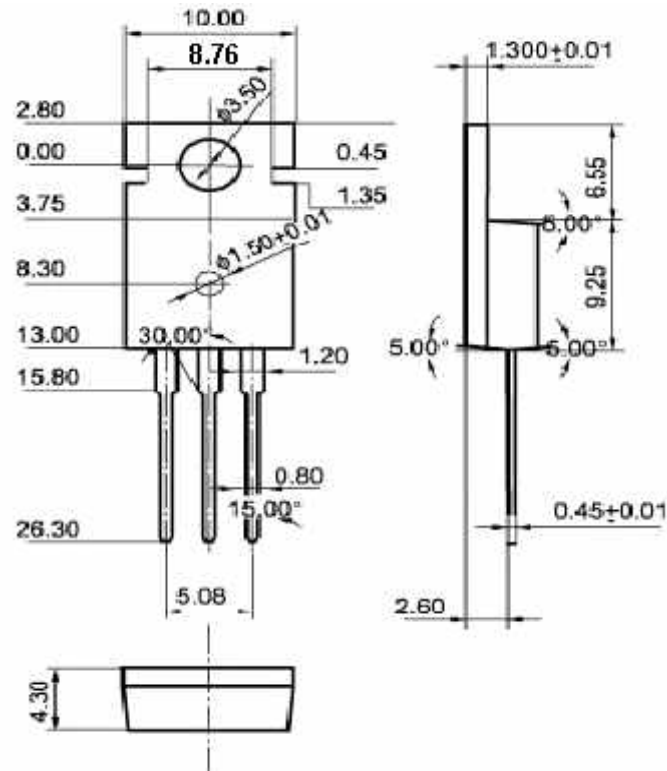


Fig.2 Outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$)

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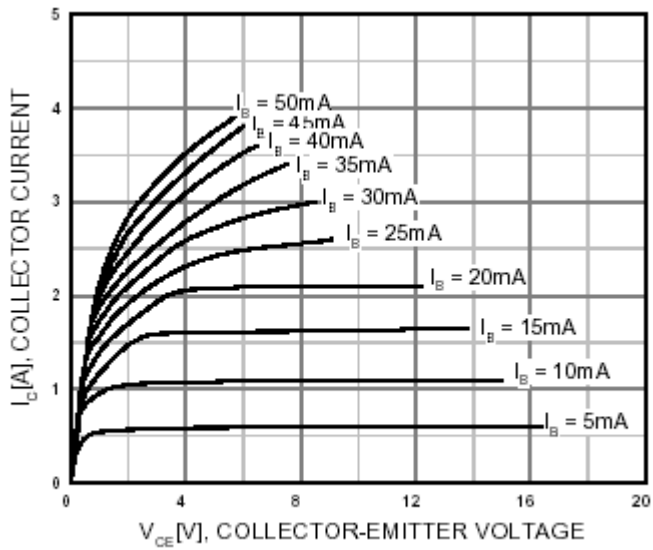


Fig.3 Static Characteristic

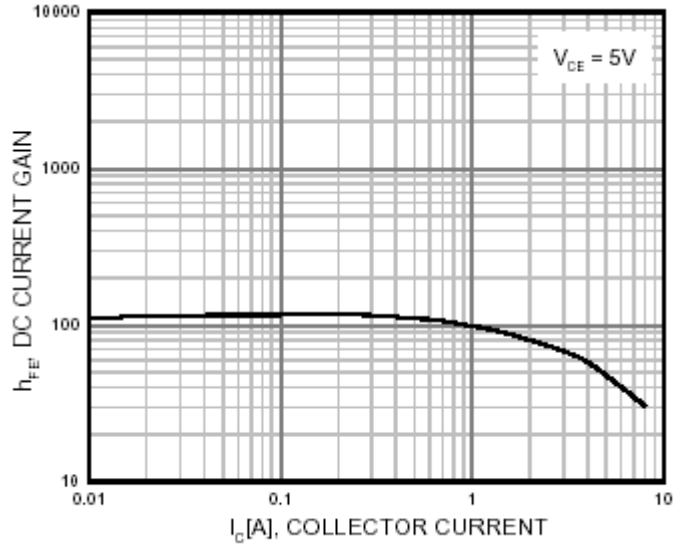


Fig.4 DC current Gain

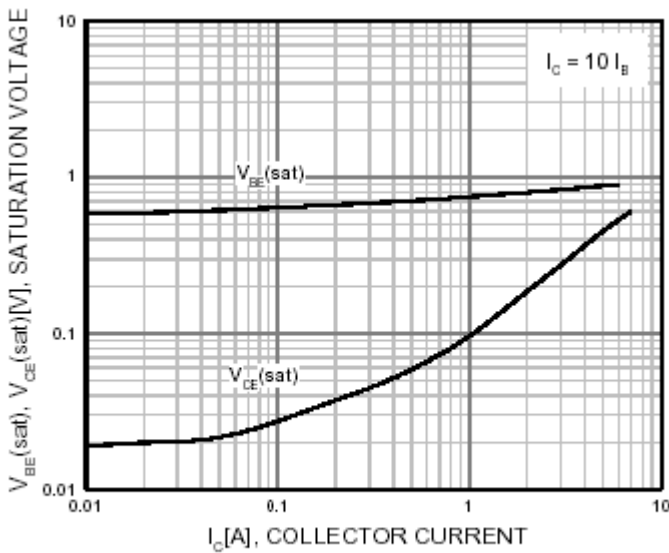


Fig.5 Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

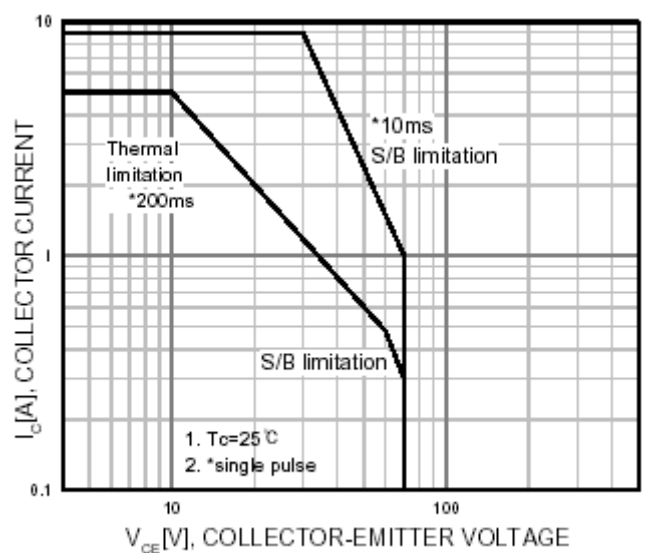


Fig.6 Safe Operating Area