

Silicon NPN Power Transistors

2SD531

DESCRIPTION

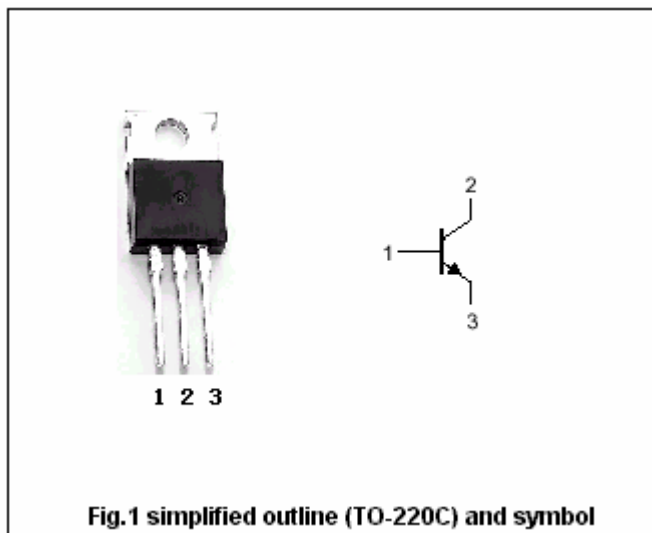
- With TO-220C package
- High current capability

APPLICATIONS

- For audio frequency power amplifier applications

PINNING

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

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	100	V
V_{CEO}	Collector-emitter voltage	Open base	90	V
V_{EBO}	Emitter-base voltage	Open collector	8	V
I_C	Collector current		5	A
P_C	Collector power dissipation	$T_c=25^\circ\text{C}$	43	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

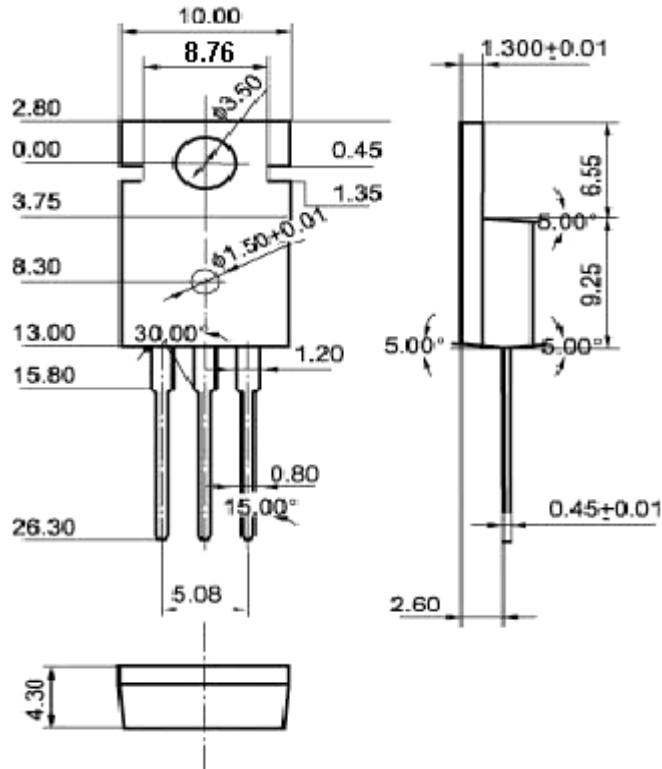
T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =50mA; R _{BE} =∞	90			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =5mA; I _E =0	100			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =5mA; I _C =0	8			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =4A; I _B =0.4 A			2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =100V; I _E =0			0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =6V; I _C =0			0.1	mA
h _{FE}	DC current gain	I _C =0.1A; V _{CE} =2V	60			

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PACKAGE OUTLINE

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