

Silicon PNP Power Transistors

2SB1293

DESCRIPTION

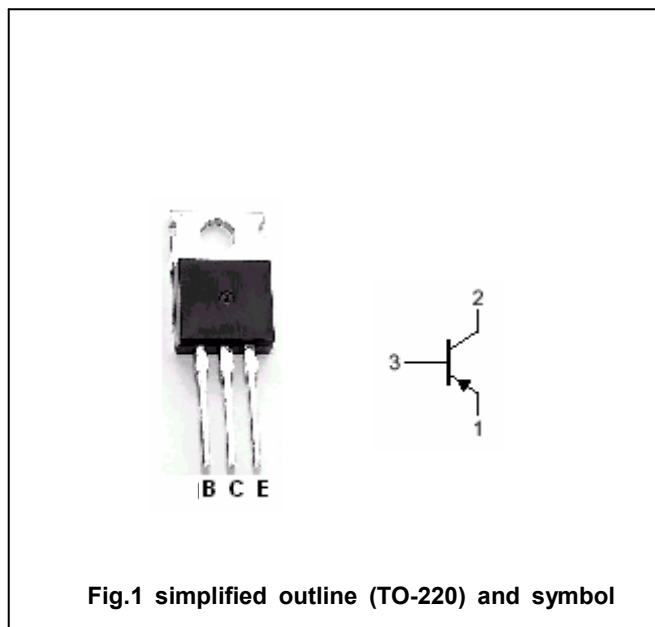
- With TO-220C package
- Low collector saturation voltage
- Complement to type 2SD1896
- Wide area of safe operation

APPLICATIONS

- For use in low frequency power amplifier applications, power drivers and DC-DC converters

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	Open emitter	-100	V
V_{CEO}	Collector -emitter voltage	Open base	-100	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-5	A
I_{CM}	Collector current-peak		-10	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	40	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 =-1mA; I _B =0	-100			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-50μA; I _E =0	-100			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-50μA; I _C =0	-5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-3A ; I _B =-0.3A			-1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-3A ; I _B =-0.3A			-1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =-100V; I _E =0			-10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-4V; I _C =0			-10	μA
h _{FE}	DC current gain	I _C =-1A ; V _{CE} =-5V	60		320	
f _T	Transition frequency	I _E =-0.5A ; V _{CE} =-5V		12		MHz
C _{OB}	Output capacitance	I _E =0 ; V _{CB} =-10V; f=1MHz		120		pF

◆ h_{FE} Classifications

D	E	F
60-120	100-200	160-320

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PACKAGE OUTLINE

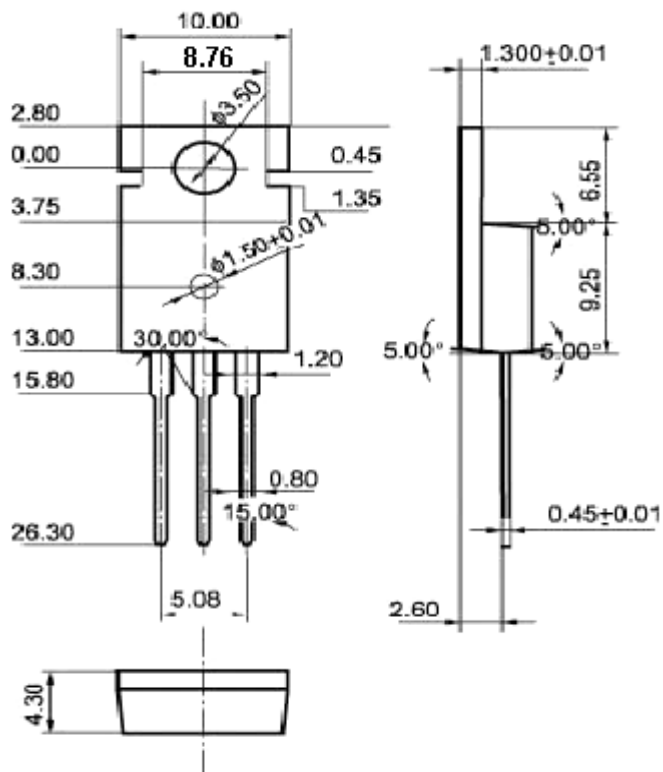


Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)