

Silicon PNP Power Transistors

2SB1293

DESCRIPTION

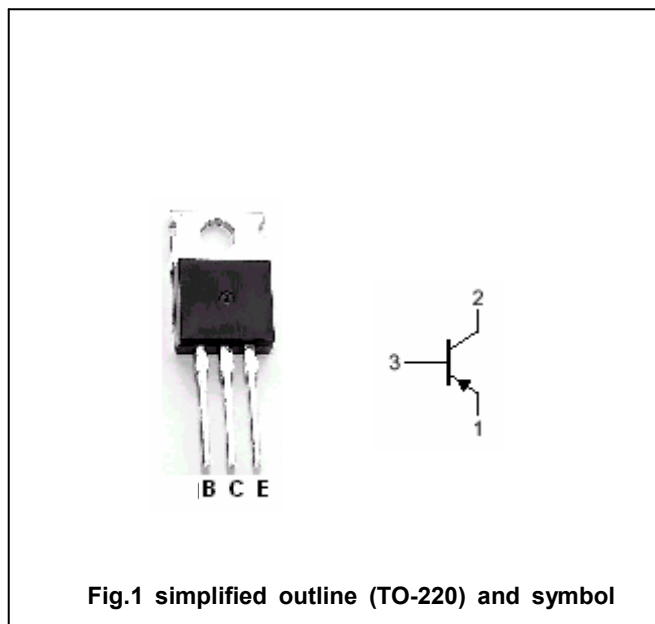
- With TO-220C package
- Low collector saturation voltage
- Complement to type 2SD1896
- Wide area of safe operation

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	$^\circ\text{C}$

Silicon PNP Power Transistors

2SB1293

CHARACTERISTICS

Tj=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	$I_C=-50\mu A; I_E=0$	-100			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-50\mu A; I_C=0$	-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

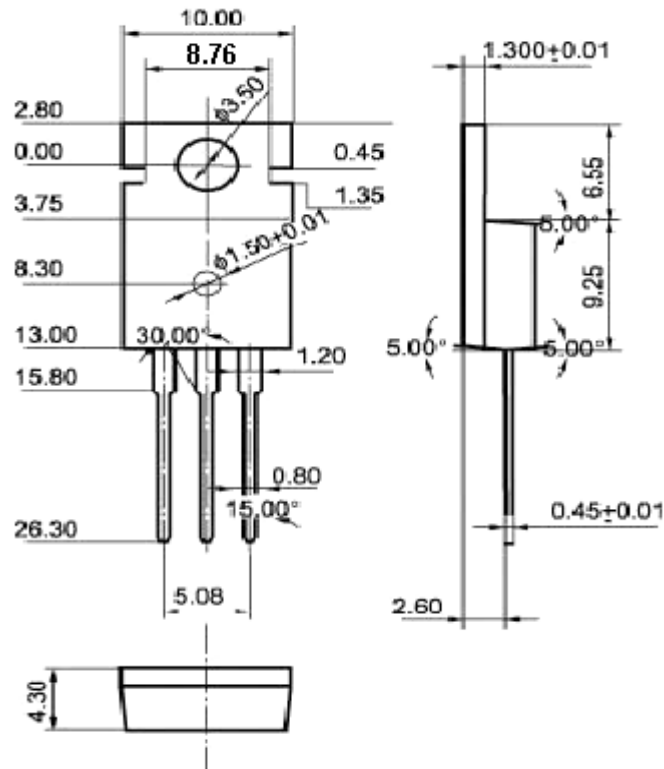
◆ h_{FE} Classifications

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

Silicon PNP Power Transistors

2SB1293

PACKAGE OUTLINE

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