

Silicon PNP Power Transistors

2SB1194

DESCRIPTION

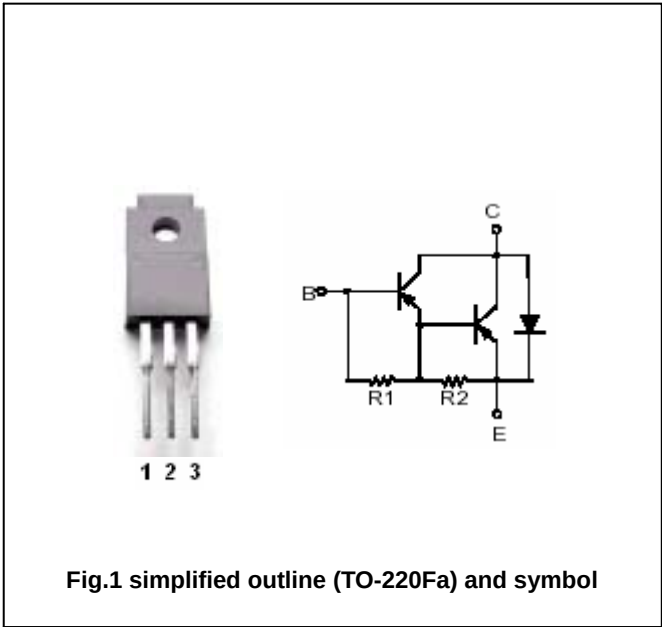
- With TO-220Fa package
- High DC current gain
- High speed switching
- DARLINGTON
- Complement to type 2SD1633

APPLICATIONS

- For power switching applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



Absolute maximum ratings(Ta=25°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	-7	V
I_C	Collector current		-5	A
I_{CM}	Collector current-peak		-8	A
I_B	Base current		-0.5	A
P_C	Collector power dissipation	$T_a=25^{\circ}\text{C}$	2	W
		$T_C=25^{\circ}\text{C}$	30	
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 _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =-0.2A; R _{BE} =∞	-100			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-3A ; I _B =-3mA			-1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-3A ; I _B =-3mA			-2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-100V; I _E =0			-100	μA
I _{CEO}	Collector cut-off current	V _{CE} =-100V; I _B =0			-100	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-7V; I _C =0			-5	mA
h _{FE}	DC current gain	I _C =-3A ; V _{CE} =-3V	1500		10000	

Switching times

t _{on}	Turn-on time	I _C =-3A ; I _{B1} =-I _{B2} =-3mA V _{CC} =-50V			3.0	μs
t _{stg}	Storage time				5.0	μs
t _f	Fall time				3.0	μs

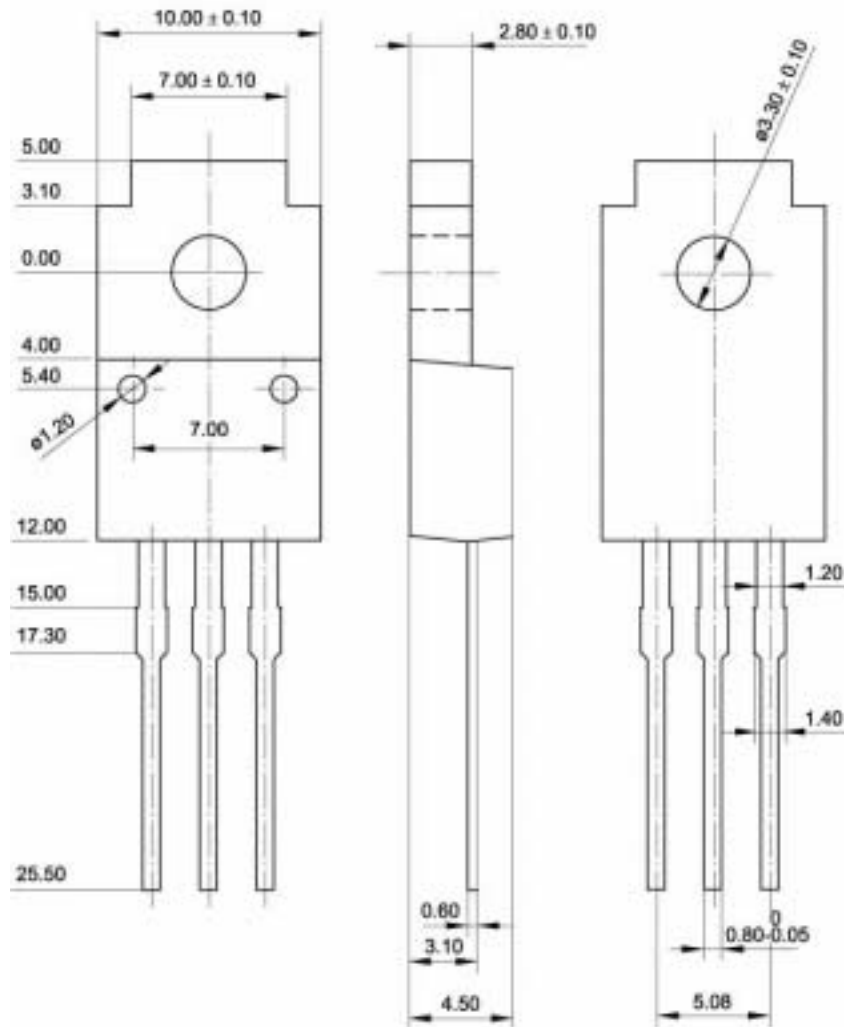
◆ h_{FE} Classifications

Q	P
1500-6000	4000-10000

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PACKAGE OUTLINE

Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)