

**Inchange Semiconductor**

**Product Specification**

**Silicon PNP Power Transistors**

**2SB1194**

**DESCRIPTION**

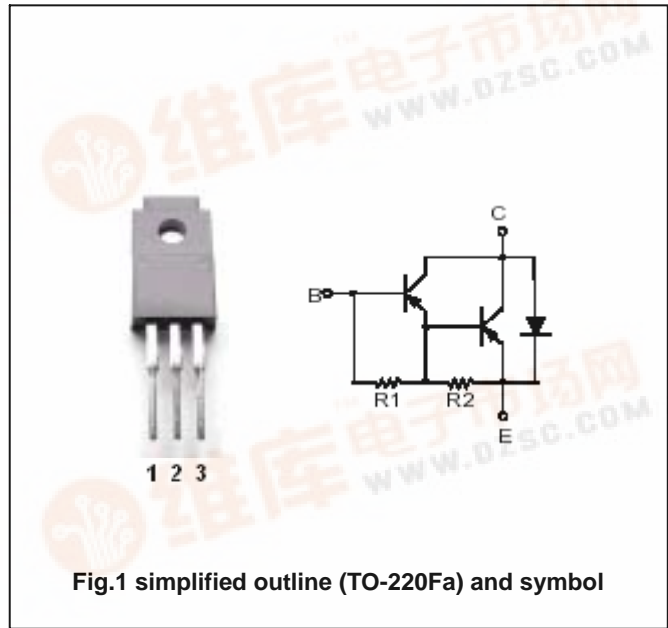
- With TO-220Fa package
- High DC current gain
- High speed switching
- DARLINGTON
- Complement to type 2SD1633

**APPLICATIONS**

- For power switching applications

**PINNING**

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



**Absolute maximum ratings(Ta=25 )**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	-100	V
V <sub>CEO</sub>	Collector -emitter voltage	Open base	-100	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-7	V
I <sub>C</sub>	Collector current		-5	A
I <sub>CM</sub>	Collector current-peak		-8	A
I <sub>B</sub>	Base current		-0.5	A
P <sub>C</sub>	Collector power dissipation	T <sub>a</sub> =25	2	W
		T <sub>C</sub> =25	30	
T <sub>j</sub>	Junction temperature		150	
T <sub>stg</sub>	Storage temperature		-55~150	

## Silicon PNP Power Transistors

## 2SB1194

## CHARACTERISTICS

T<sub>j</sub>=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =-0.2A; R <sub>BE</sub> =	-100			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-3A ; I <sub>B</sub> =-3mA			-1.5	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =-3A ; I <sub>B</sub> =-3mA			-2.0	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-100V; I <sub>E</sub> =0			-100	μ A
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =-100V; I <sub>B</sub> =0			-100	μ A
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-7V; I <sub>C</sub> =0			-5	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =-3A ; V <sub>CE</sub> =-3V	1500		10000	
Switching times						
t <sub>on</sub>	Turn-on time	I <sub>C</sub> =-3A ; I <sub>B1</sub> =-I <sub>B2</sub> =-3mA V <sub>CC</sub> =-50V			3.0	μ s
t <sub>stg</sub>	Storage time				5.0	μ s
t <sub>f</sub>	Fall time				3.0	μ s

◆ h<sub>FE</sub> Classifications

Q	P
1500-6000	4000-10000

PACKAGE OUTLINE

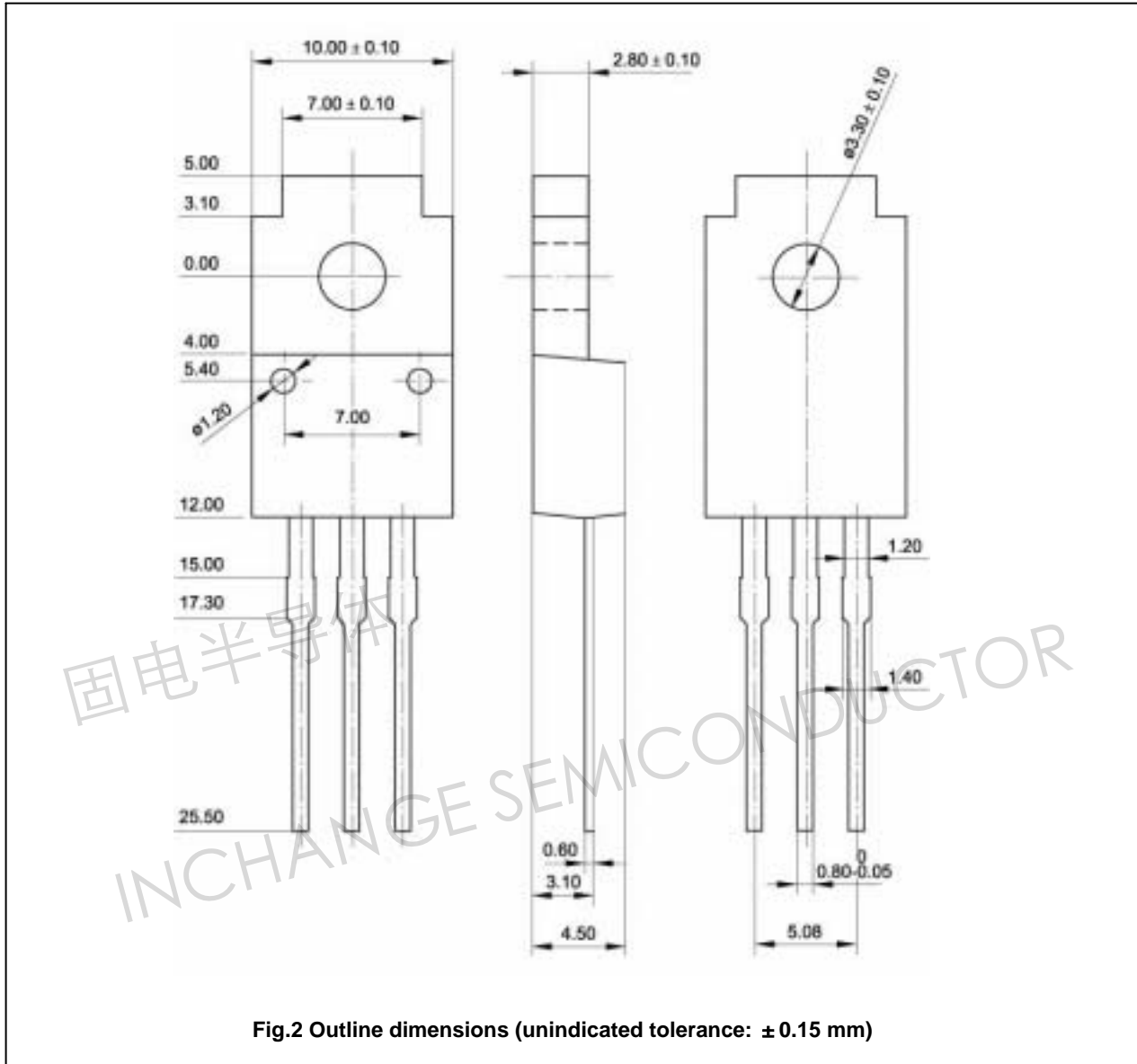


Fig.2 Outline dimensions (unindicated tolerance:  $\pm 0.15$  mm)