

Silicon PNP Power Transistors

2SB1193

DESCRIPTION

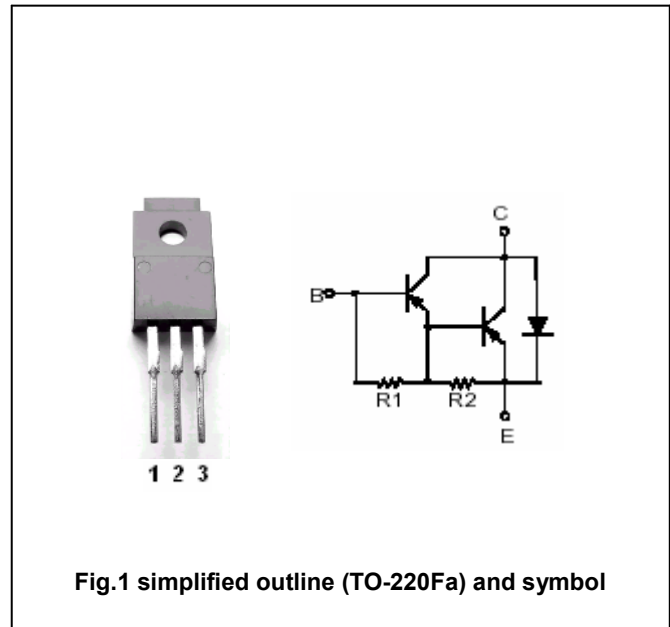
- With TO-220Fa package
- High DC current gain
- High speed switching
- DARLINGTON
- Complement to type 2SD1773

APPLICATIONS

- For medium speed switching applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

Absolute maximum ratings($T_a=25^\circ$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-120	V
V_{CEO}	Collector -emitter voltage	Open base	-120	V
V_{EBO}	Emitter-base voltage	Open collector	-7	V
I_C	Collector current		-8	A
I_{CM}	Collector current-peak		-12	A
P_C	Collector power dissipation	$T_a=25^\circ$	2	W
		$T_c=25^\circ$	50	
T_j	Junction temperature		150	$^\circ$
T_{stg}	Storage temperature		-55~150	$^\circ$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =-2A; R _{BE} =∞; L=10mH	-120			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-50mA; I _C =0	-7			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =-4A ; I _B =-8mA			-1.5	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =-8A ; I _B =-80mA			-3.0	V
V _{BEsat-1}	Base-emitter saturation voltage	I _C =-4A ; I _B =-8mA			-2.0	V
V _{BEsat-2}	Base-emitter saturation voltage	I _C =-8A ; I _B =-80mA			-3.5	V
I _{CBO}	Collector cut-off current	V _{CB} =-120V; I _E =0			-100	μA
I _{CEO}	Collector cut-off current	V _{CE} =-100V; R _{BE} =∞			-10	μA
h _{FE}	DC current gain	I _C =-4A ; V _{CE} =-3V	1000		20000	

Switching times

t _{on}	Turn-on time	I _C =-4A ; I _{B1} =-I _{B2} =-8mA V _{CC} =-50V		0.7		μs
t _{stg}	Storage time			3.5		μs
t _f	Fall time			2.0		μs

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PACKAGE OUTLINE

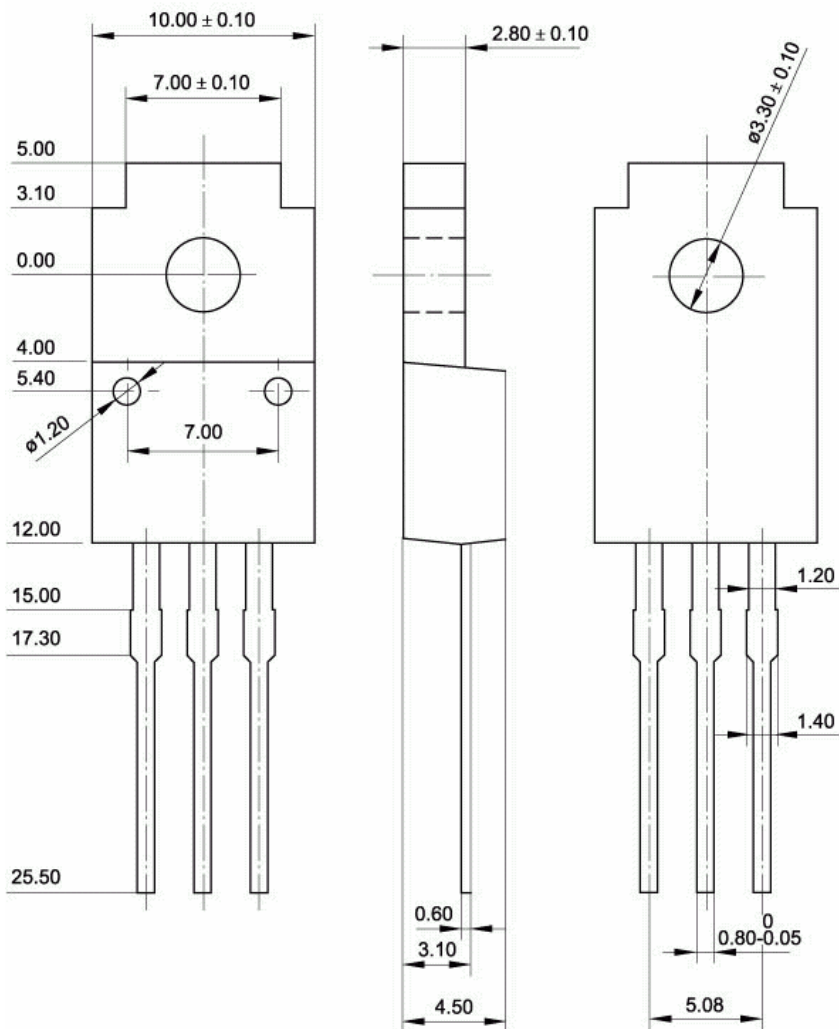


Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)