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

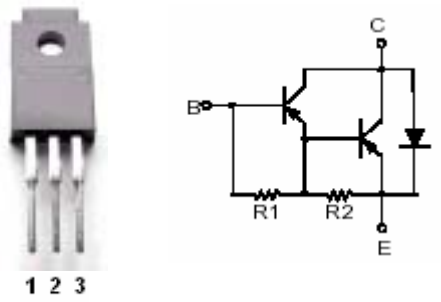

Fig.1 simplified outline (TO-220Fa) and symbol

Absolute maximum ratings(Ta=25℃)

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℃	2	W
		T_C=25℃	50	
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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CHARACTERISTICS

Tj=25℃ 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

PACKAGE OUTLINE

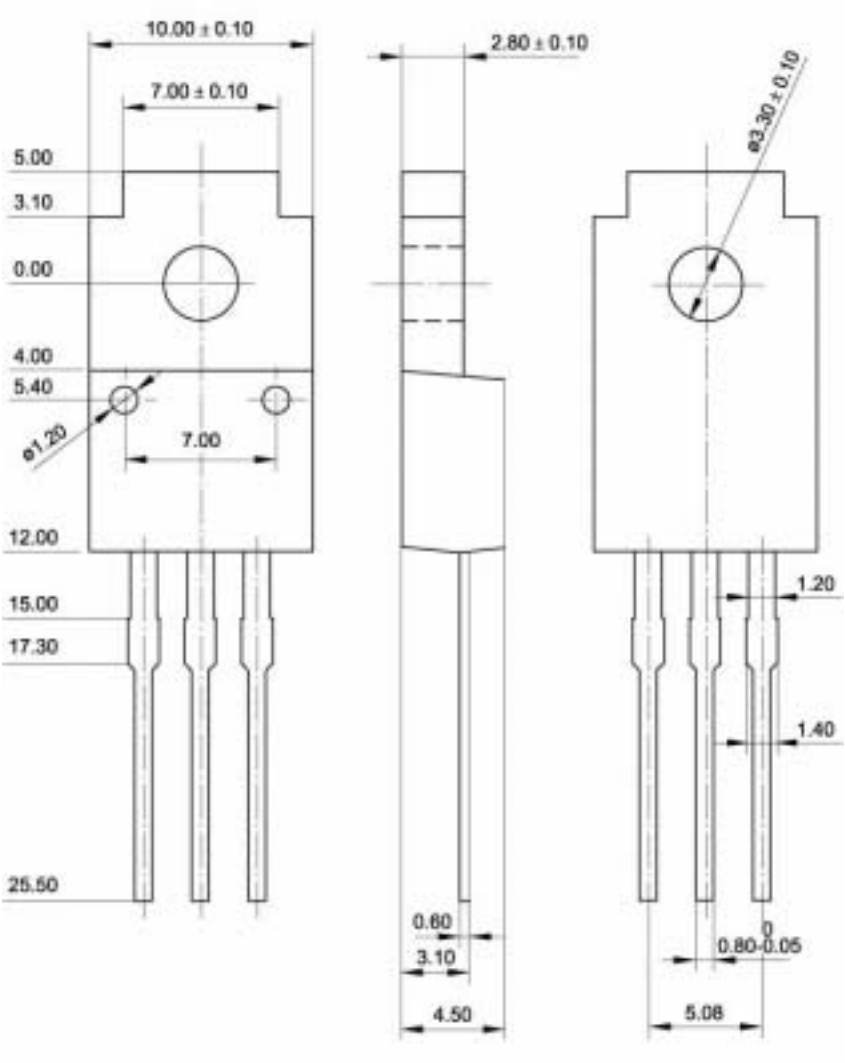

Fig.2 Outline dimensions (unindicated tolerance: ±0.15 mm)