

Silicon PNP Power Transistors

2SB1402

DESCRIPTION

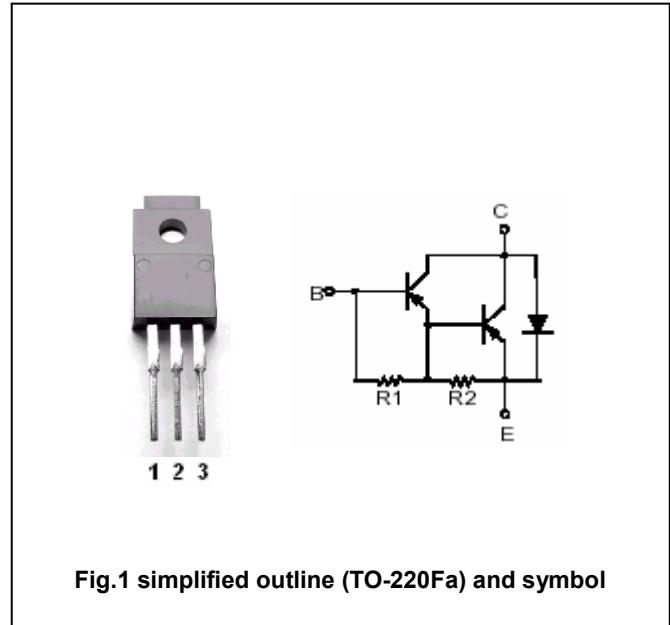
- With TO-220Fa package
- High DC current gain
- Low collector saturation voltage
- DARLINGTON

APPLICATIONS

- For use in low frequency power amplifier applications

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	-120	V
V_{CEO}	Collector -emitter voltage	Open base	-120	V
V_{EBO}	Emitter-base voltage	Open collector	-7	V
I_C	Collector current		-3	A
I_{CM}	Collector current-peak		-6	A
P_C	Collector power dissipation	$T_a=25^\circ\text{C}$	2	W
		$T_C=25^\circ\text{C}$	25	
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 _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-25mA; R _{BE} =∞	-120			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-100μA; I _E =0	-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 =-1.5A ;I _B =-3mA			-1.5	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =-3A ;I _B =-30mA			-3.0	V
V _{BEsat-1}	Base-emitter saturation voltage	I _C =-1.5A ;I _B =-3mA			-2.0	V
V _{BEsat-2}	Base-emitter saturation voltage	I _C =-3A ;I _B =-30mA			-3.5	V
I _{CBO}	Collector cut-off current	V _{CB} =-100V; I _E =0			-10	μA
I _{CEO}	Collector cut-off current	V _{CE} =-100V; R _{BE} =∞			-10	μA
h _{FE}	DC current gain	I _C =-1.5A ; V _{CE} =-3V	1000		20000	
V _D	Diode forward voltage	I _D =3A			3.0	V

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PACKAGE OUTLINE

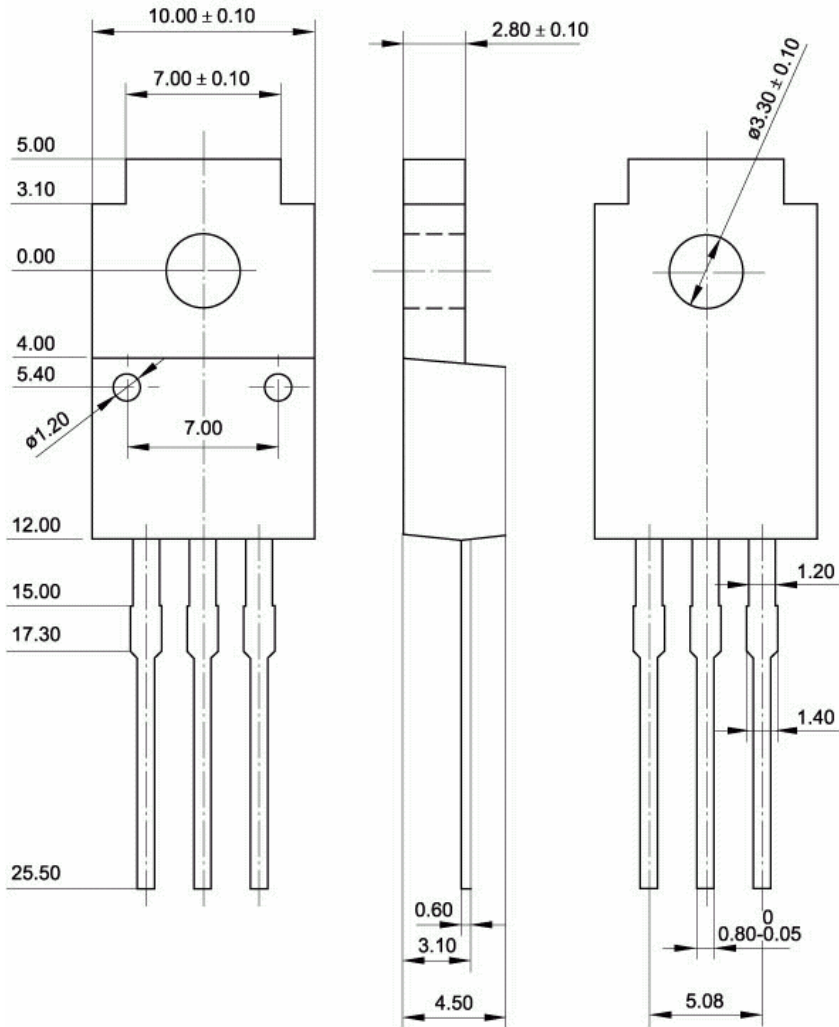


Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)