

## Silicon PNP Power Transistors

2SB1402

## DESCRIPTION

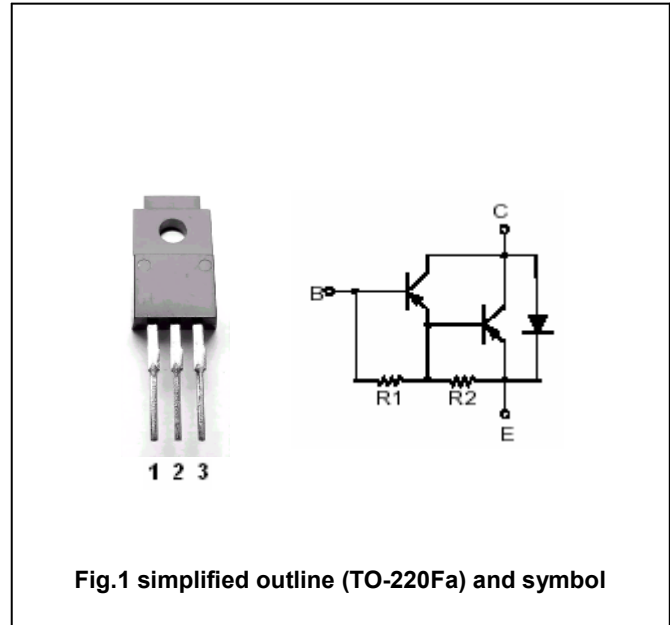
- With TO-220Fa package
- High DC current gain
- Low collector saturation voltage
- DARLINGTON

## 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<sub>j</sub>=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =-25mA; R <sub>BE</sub> =∞	-120			V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =-100μA; I <sub>E</sub> =0	-120			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-50mA; I <sub>C</sub> =0	-7			V
V <sub>CEsat-1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-1.5A ;I <sub>B</sub> =-3mA			-1.5	V
V <sub>CEsat-2</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-3A ;I <sub>B</sub> =-30mA			-3.0	V
V <sub>BEsat-1</sub>	Base-emitter saturation voltage	I <sub>C</sub> =-1.5A ;I <sub>B</sub> =-3mA			-2.0	V
V <sub>BEsat-2</sub>	Base-emitter saturation voltage	I <sub>C</sub> =-3A ;I <sub>B</sub> =-30mA			-3.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-100V; I <sub>E</sub> =0			-10	μA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =-100V; R <sub>BE</sub> =∞			-10	μA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =-1.5A ; V <sub>CE</sub> =-3V	1000		20000	
V <sub>D</sub>	Diode forward voltage	I <sub>D</sub> =3A			3.0	V

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PACKAGE OUTLINE

