

## Silicon PNP Power Transistors

2SB1186

## DESCRIPTION

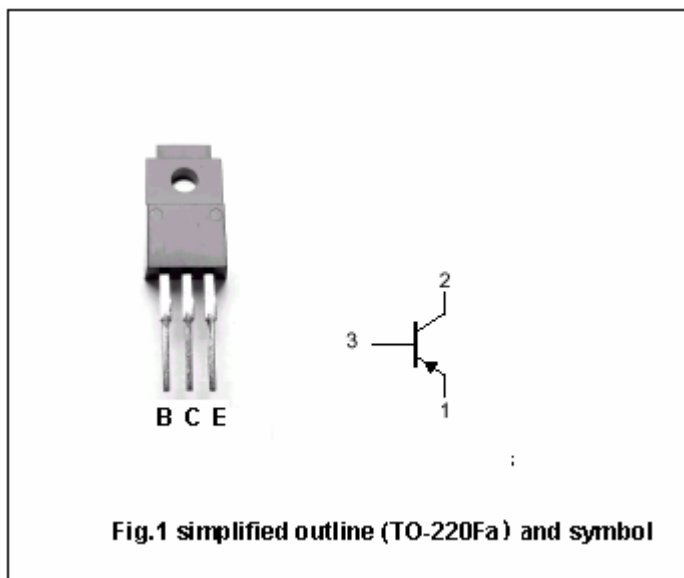
- With TO-220Fa package
- Low collector saturation voltage
- Complement to type 2SD1763
- High breakdown voltage

## APPLICATIONS

- For use in low frequency power amplifier applications

## PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base

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	-5	V
$I_C$	Collector current		-1.5	A
$I_{CM}$	Collector current-peak		-3.0	A
$P_C$	Collector power dissipation	$T_a=25^\circ\text{C}$	2.0	W
		$T_c=25^\circ\text{C}$	20	
$T_j$	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> =-1mA; I <sub>B</sub> =0	-120			V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =-50μA; I <sub>E</sub> =0	-120			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-50μA; I <sub>C</sub> =0	-5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-1A; I <sub>B</sub> =-0.1A			-2.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =-1A; I <sub>B</sub> =-0.1A			-1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-100V; I <sub>E</sub> =0			-1.0	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-4V; I <sub>C</sub> =0			-1.0	μA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =-0.1A; V <sub>CE</sub> =-5V	100		320	
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-0.1A; V <sub>CE</sub> =-5V		50		MHz
C <sub>OB</sub>	Collector output capacitance	I <sub>E</sub> =0; f=1MHz; V <sub>CB</sub> =-10V		30		pF

◆ h<sub>FE</sub> Classifications

E	F
100-200	160-320

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PACKAGE OUTLINE

