

Silicon PNP Power Transistors

2SB1159

DESCRIPTION

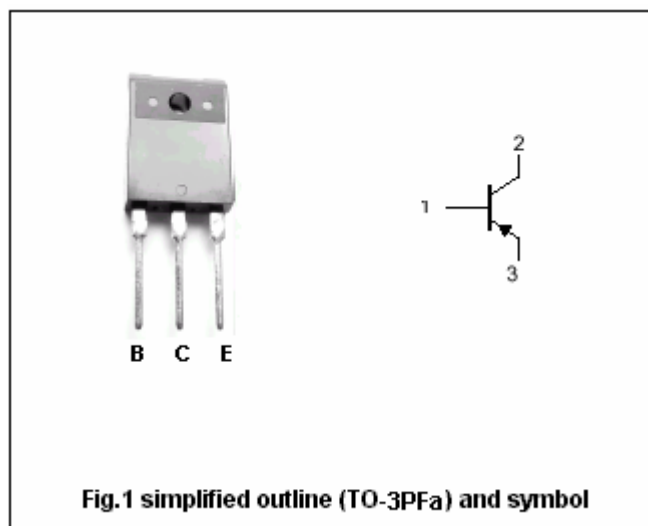
- With TO-3PFa package
- Complement to type 2SD1714
- High f_T
- Wide area of safe operation

APPLICATIONS

- For high 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	-140	V
V_{CEO}	Collector-emitter voltage	Open base	-140	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-7	A
I_{CP}	Collector current-peak		-12	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	80	W
		$T_a=25^\circ\text{C}$	3	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-5A$; $I_B=-0.5A$			-2.0	V
V_{BE}	Base-emitter on voltage	$I_C=-5A$; $V_{CE}=-5V$			-1.8	V
I_{CBO}	Collector cut-off current	$V_{CB}=-140V$; $I_E=0$			-50	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-3V$; $I_C=0$			-50	μA
h_{FE-1}	DC current gain	$I_C=-20mA$; $V_{CE}=-5V$	20			
h_{FE-2}	DC current gain	$I_C=-1A$; $V_{CE}=-5V$	60		200	
h_{FE-3}	DC current gain	$I_C=-5A$; $V_{CE}=-5V$	20			
C_{OB}	Output capacitance	$I_E=0$; $V_{CB}=-10V$; $f=1MHz$		220		pF
f_T	Transition frequency	$I_C=-0.5A$; $V_{CE}=-5V$		20		MHz

◆ h_{FE-2} classifications

Q	S	P
60-120	80-160	100-200

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[illegible]

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