

Silicon PNP Power Transistors

2SB859

DESCRIPTION

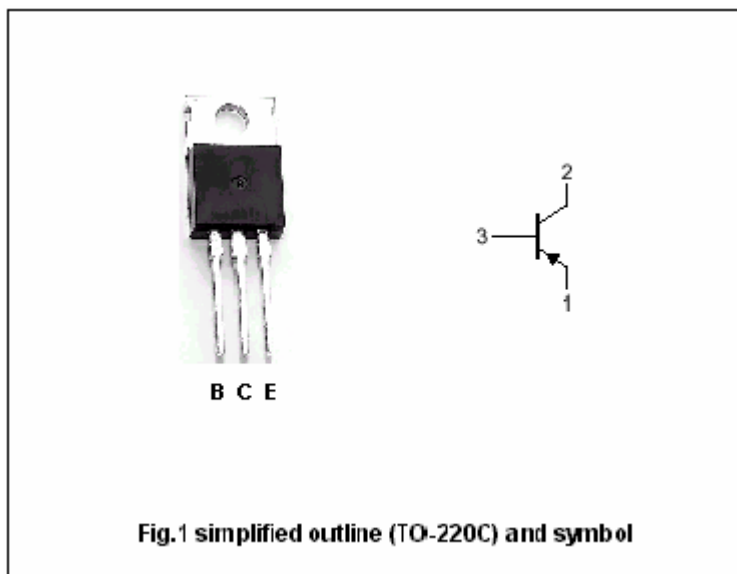
- With TO-220C package
- Complement to type 2SD1135

APPLICATIONS

- Low frequency power amplifier

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base

Absolute maximum ratings($T_c=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-100	V
V_{CEO}	Collector-emitter voltage	Open base	-80	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-4	A
I_{CP}	Collector current-Peak		-8	A
P_C	Collector power dissipation	$T_c=25^\circ\text{C}$	40	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-45~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = -50\text{mA}$; $R_{BE} = \infty$	-80			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = -10\mu\text{A}$; $I_C = 0$	-5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C = -2\text{A}$; $I_B = -0.2\text{A}$			-2.0	V
V_{BE}	Base-emitter voltage	$I_C = -1\text{A}$; $V_{CE} = -5\text{V}$			-1.5	V
I_{CBO}	Collector cut-off current	$V_{CB} = -80\text{V}$; $I_E = 0$			-0.1	mA
h_{FE-1}	DC current gain	$I_C = -1\text{A}$; $V_{CE} = -5\text{V}$	60		200	
h_{FE-2}	DC current gain	$I_C = -0.1\text{A}$; $V_{CE} = -5\text{V}$	35			
C_{ob}	Collector output capacitance	$I_C = 0$; $V_{CB} = -20\text{V}$; $f = 1\text{MHz}$		75		pF
f_T	Transition frequency	$I_C = -0.5\text{A}$; $V_{CE} = -5\text{V}$		20		MHz

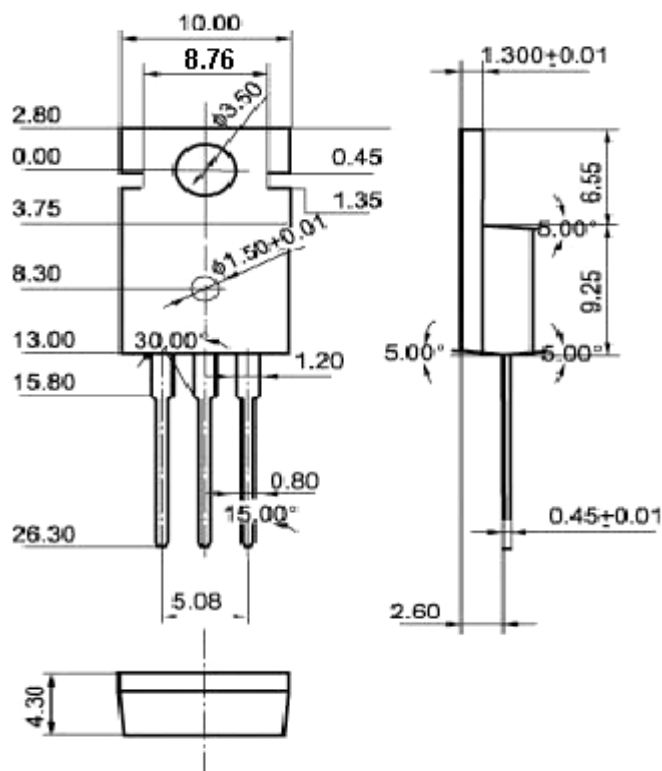
◆ h_{FE-1} classifications

B	C
60-120	100-200

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PACKAGE OUTLINE

Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)

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