

Silicon PNP Power Transistors

2SB857 2SB858

DESCRIPTION

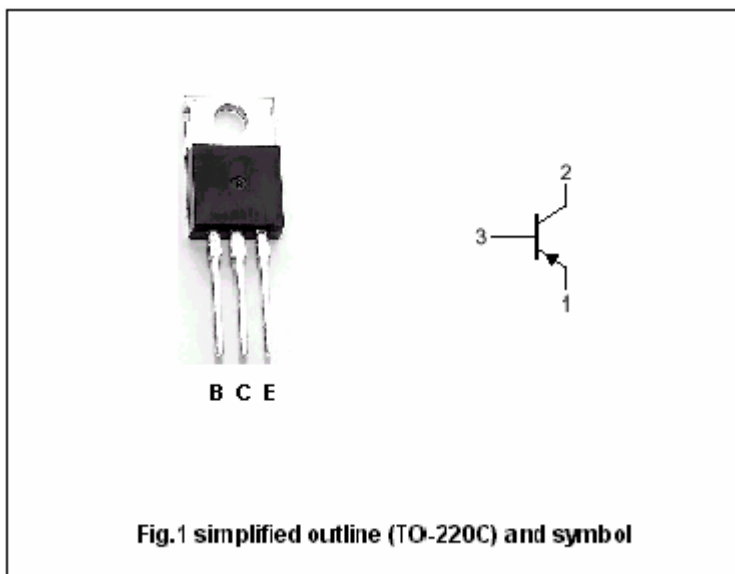
- With TO-220C package
- Complement to type 2SD1133/1134

APPLICATIONS

- Low frequency power amplifier

PINNING

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



Absolute maximum ratings(Tc=25 )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-70	V
$V_{CEO}$	Collector-emitter voltage	2SB857	-50	V
		2SB858	-60	
$V_{EBO}$	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	$T_C=25$	40	W
$T_j$	Junction temperature		150	
$T_{stg}$	Storage temperature		-45~150	

Silicon PNP Power Transistors

2SB857 2SB858

CHARACTERISTICS

T<sub>j</sub>=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	2SB857	-50			V
		2SB858	-60			
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =-10 μ A; I <sub>E</sub> =0	-70			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-10 μ A; I <sub>C</sub> =0	-5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-2 A; I <sub>B</sub> =-0.2 A			-1.0	V
V <sub>BE</sub>	Base-emitter voltage	I <sub>C</sub> =-1 A; V <sub>CE</sub> =-4V			-1.0	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-50V; I <sub>E</sub> =0			-1	μ A
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-1 A; V <sub>CE</sub> =-4V	60		320	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-0.1 A; V <sub>CE</sub> =-4V	35			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-0.5 A; V <sub>CE</sub> =-4V		15		MHz

◆ h<sub>FE-1</sub> classifications

B	C	D
60-120	100-200	160-320

PACKAGE OUTLINE

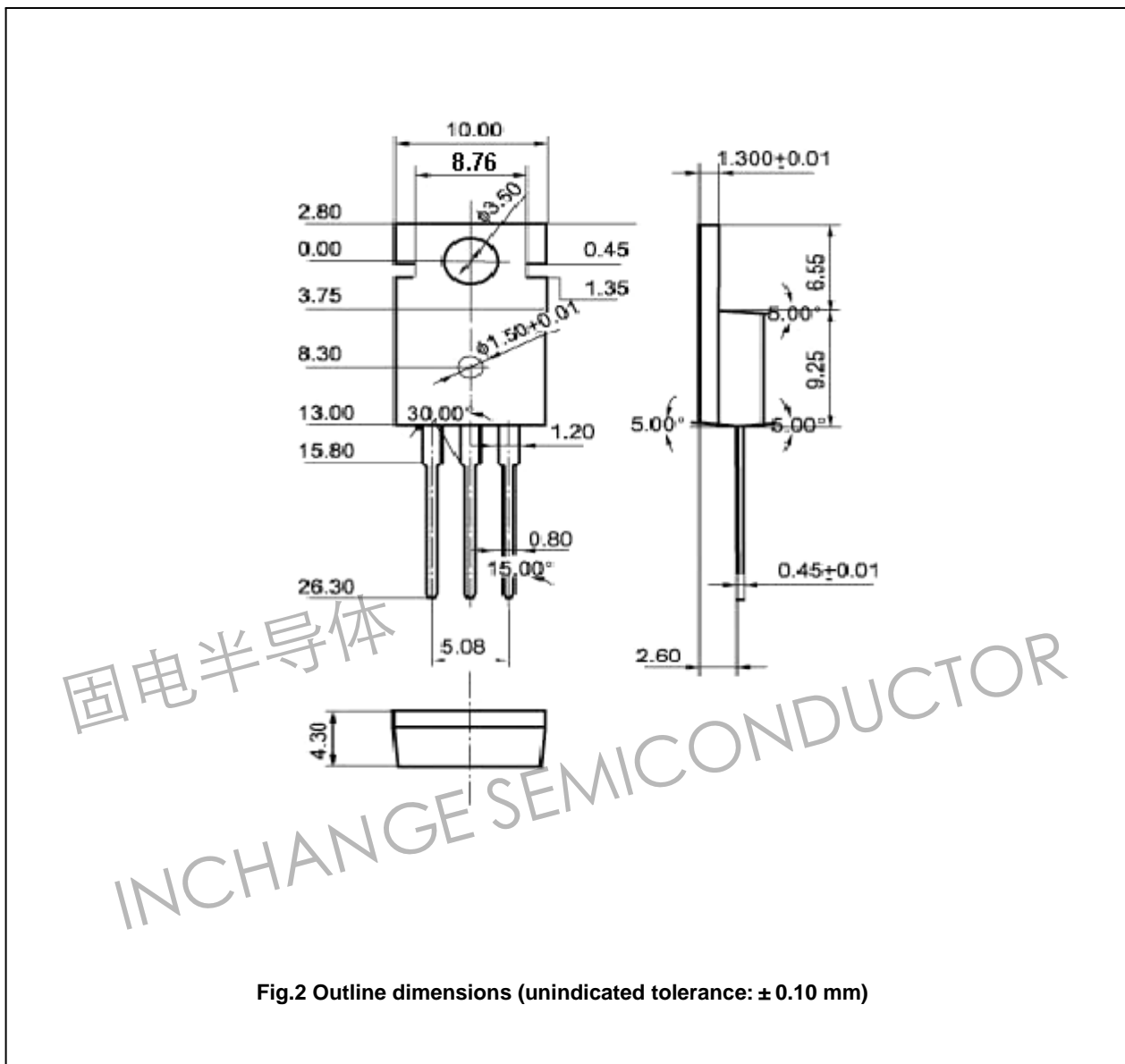


Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)

Silicon PNP Power Transistors

2SB857 2SB858

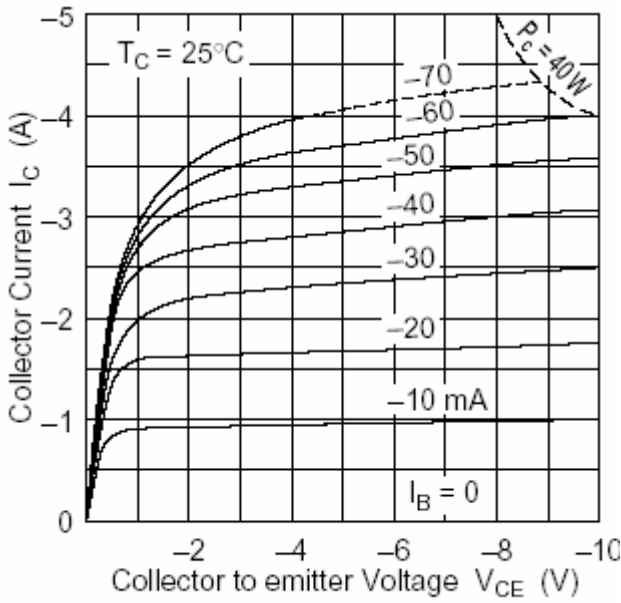


Fig.3 Static Characteristic

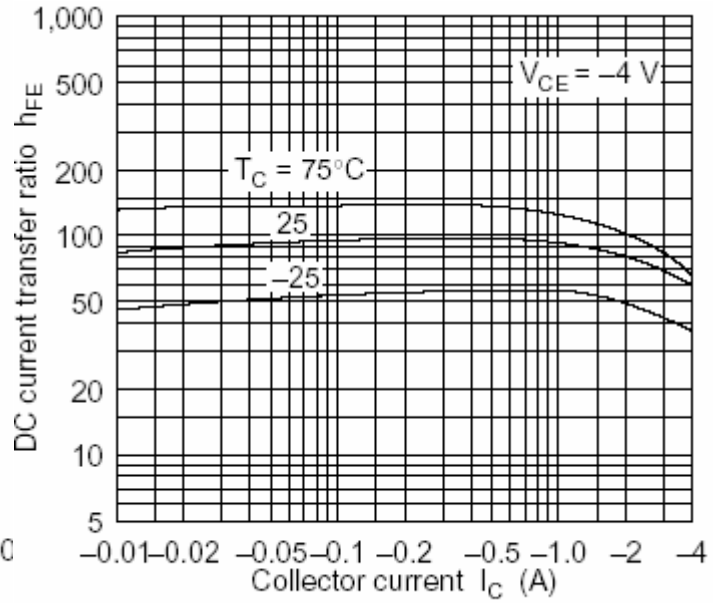


Fig.4 DC current Gain

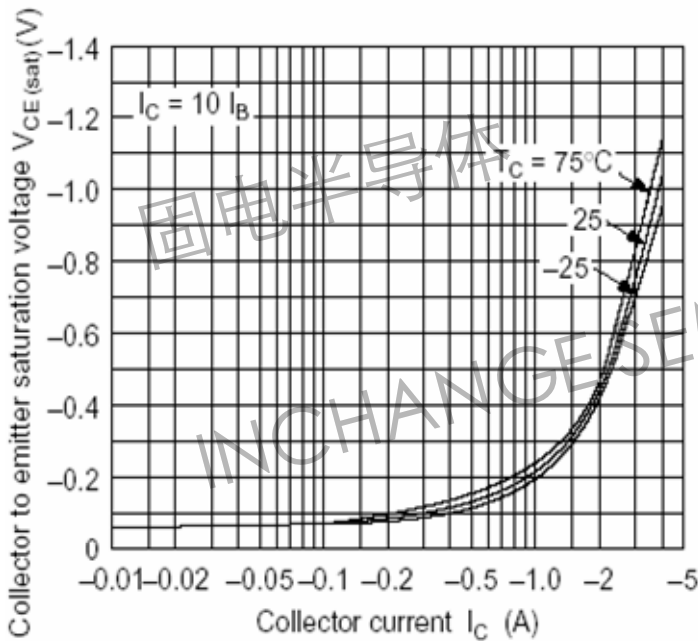


Fig.5 Collector-Emitter Saturation Voltage

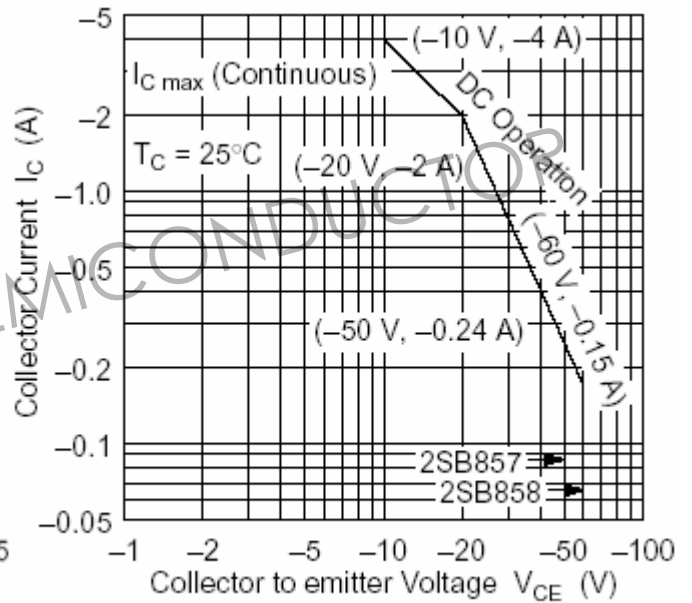


Fig.6 Safe Operating Area