

## Silicon PNP Power Transistors

2SB1367

## DESCRIPTION

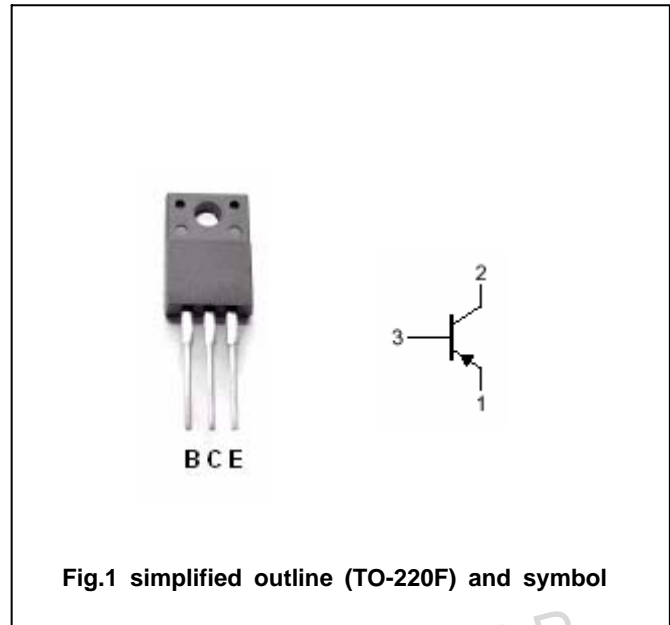
- With TO-220F package
- Complement to type 2SD2059
- Low collector saturation voltage:  
 $V_{CE(sat)} = -2.0V(\text{Max})$  at  $I_C = -4A, I_B = -0.4A$
- Collector power dissipation:  
 $P_C = 30W(T_C = 25^\circ\text{C})$

## APPLICATIONS

- With general purpose 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	-100	V
$V_{CEO}$	Collector-emitter voltage	Open base	-100	V
$V_{EBO}$	Emitter-base voltage	Open collector	-5	V
$I_C$	Collector current		-5	A
$I_B$	Base current		-0.5	A
$P_C$	Collector dissipation	$T_C = 25$	30	W
$T_j$	Junction temperature		150	
$T_{stg}$	Storage temperature		-55~150	

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## 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	I <sub>C</sub> =-50mA ; I <sub>B</sub> =0	-100			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-4A ; I <sub>B</sub> =-0.4A			-2.0	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =-4A ; V <sub>CE</sub> =-5V			-1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-100V ; I <sub>E</sub> =0			-0.1	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V ; I <sub>C</sub> =0			-1.0	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-5V	40		240	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-4A ; V <sub>CE</sub> =-5V	20			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-5V		5.0		MHz
C <sub>OB</sub>	Collector output capacitance	f=1MHz ; V <sub>CB</sub> =-10V		270		pF

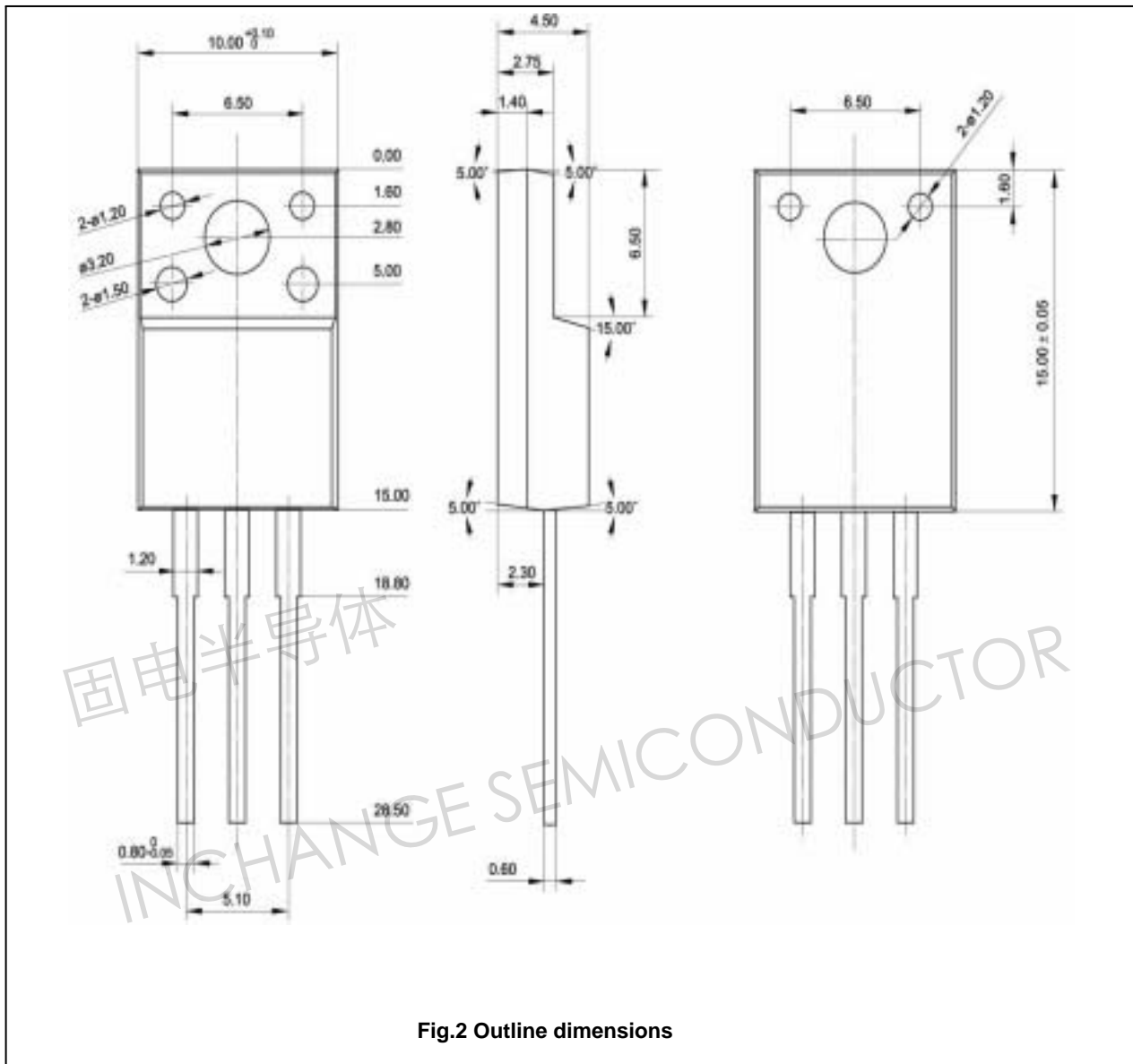
◆ h<sub>FE-1</sub> Classifications

R	O	Y
40-80	70-140	120-240

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PACKAGE OUTLINE



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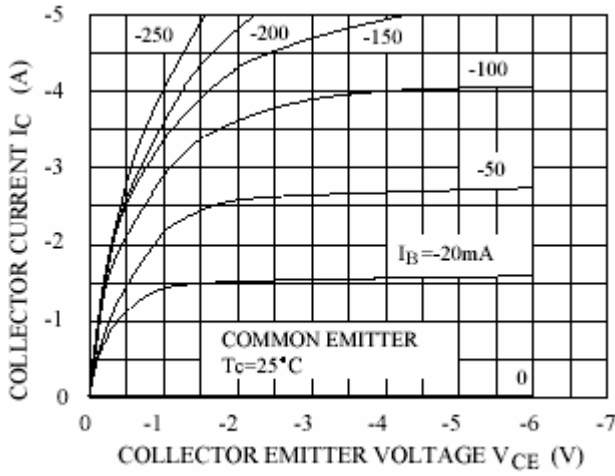


Fig.3 Static Characteristic

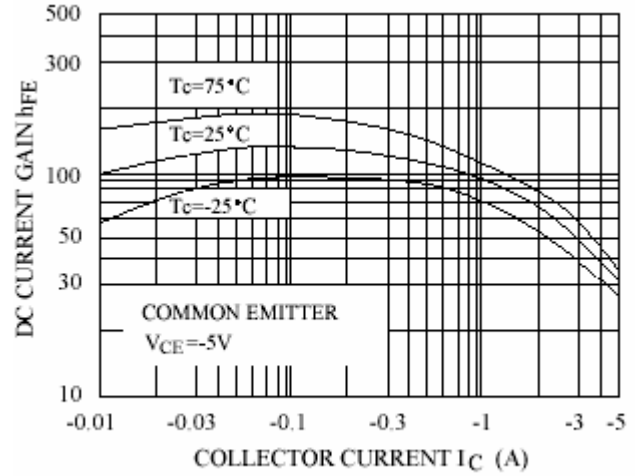


Fig.4 DC current Gain

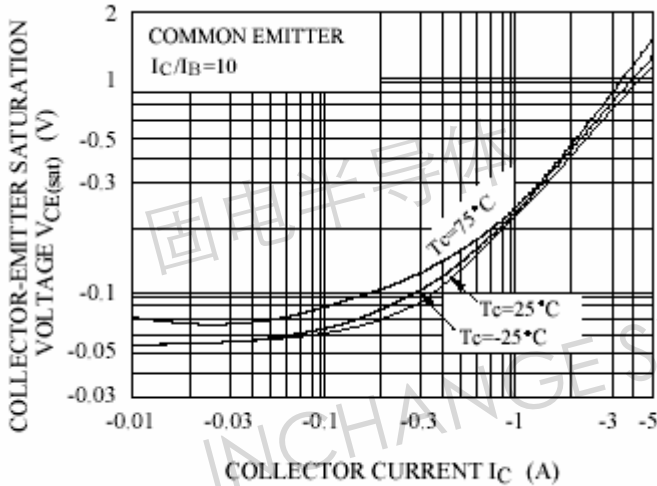


Fig.5 Collector-Emitter Saturation Voltage

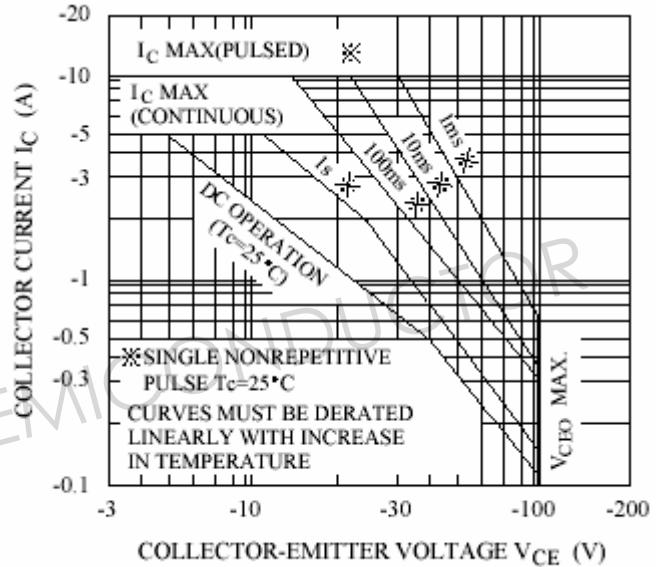


Fig.6 Safe Operating Area