

Silicon PNP Power Transistors

2SB1371

DESCRIPTION

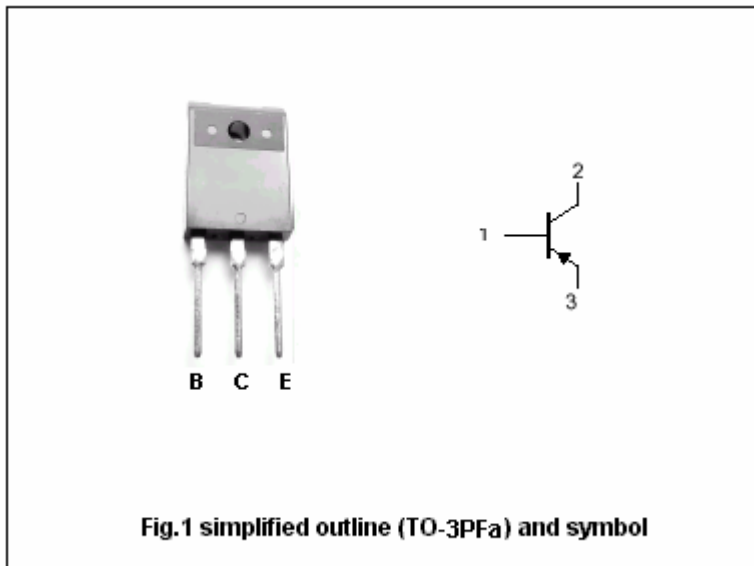
- With TO-3PFa package
- Complement to type 2SD2064
- High transition frequency
- Satisfactory linearity of  $h_{FE}$

APPLICATIONS

- For high power amplification

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	-120	V
$V_{CEO}$	Collector-emitter voltage	Open base	-120	V
$V_{EBO}$	Emitter-base voltage	Open collector	-5	V
$I_C$	Collector current		-6	A
$I_{CM}$	Collector current-peak		-10	A
$P_C$	Collector power dissipation	$T_C=25$	70	W
		$T_a=25$	3	
$T_j$	Junction temperature		150	
$T_{stg}$	Storage temperature		-55~150	

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## CHARACTERISTICS

 $T_j=25$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEsat}$	Collector-emitter saturation voltage	$I_C=-4A ; I_B=-0.4A$			-2.0	V
$V_{BE}$	Base-emitter on voltage	$I_C=-4A ; V_{CE}=-5V$			-1.8	V
$I_{CBO}$	Collector cut-off current	$V_{CB}=-120V ; I_E=0$			-50	$\mu A$
$I_{EBO}$	Emitter cut-off current	$V_{EB}=-3V ; I_C=0$			-50	$\mu A$
$h_{FE-1}$	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	$I_C=-4A ; V_{CE}=-5V$	20			
$C_{OB}$	Output capacitance	$I_E=0 ; V_{CB}=-10V ; f=1.0MHz$		150		pF
$f_T$	Transition frequency	$I_C=-0.5A ; V_{CE}=-5V ; f=1.0MHz$		15		MHz

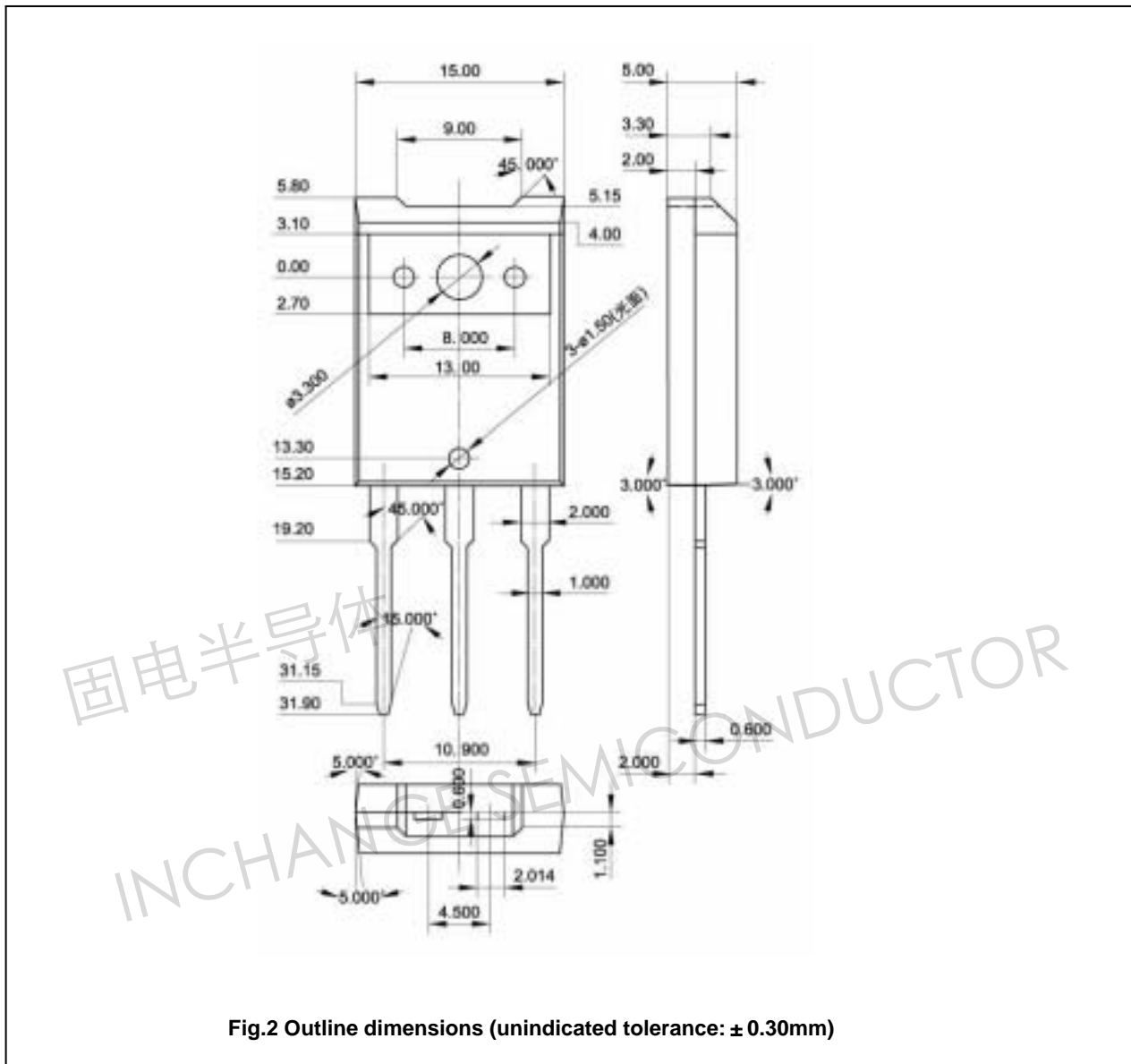
◆  $h_{FE-2}$  classifications

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

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PACKAGE OUTLINE



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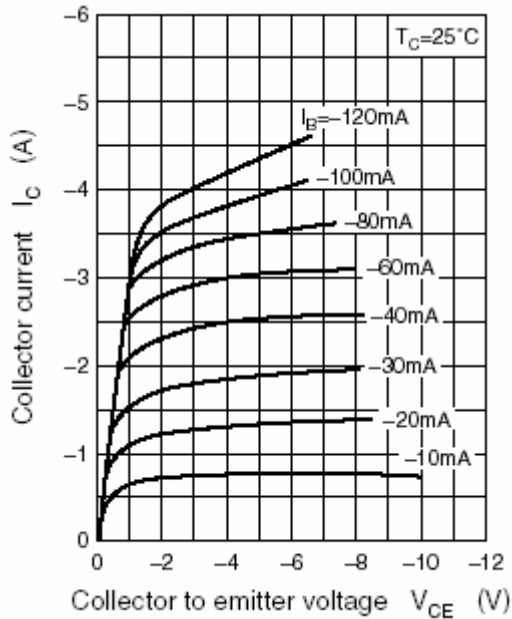


Fig.3 Static Characteristic

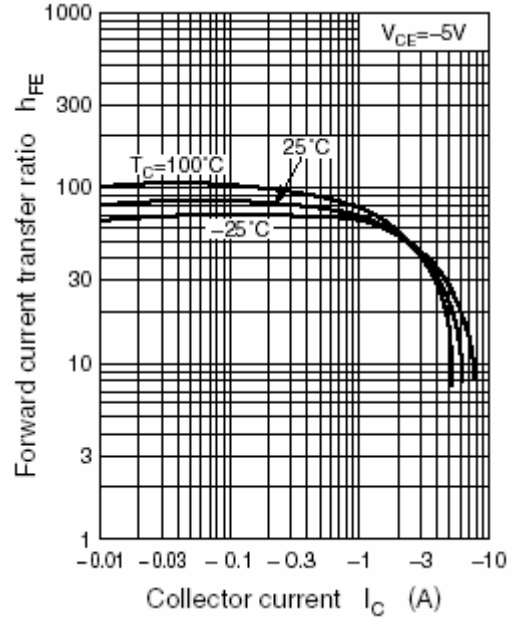


Fig.4 DC current Gain

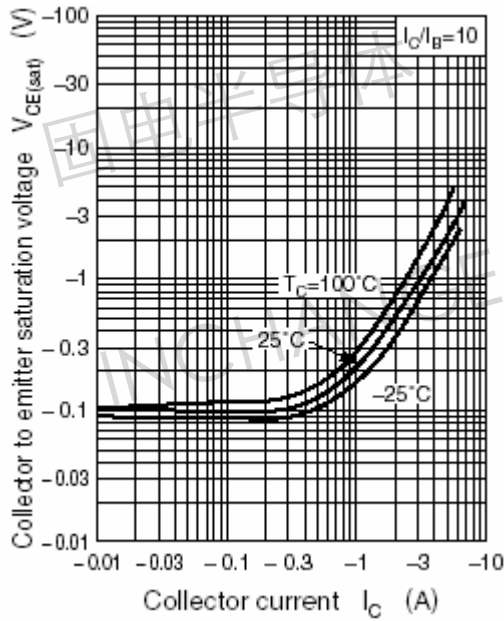


Fig.5 Collector-Emitter Saturation Voltage

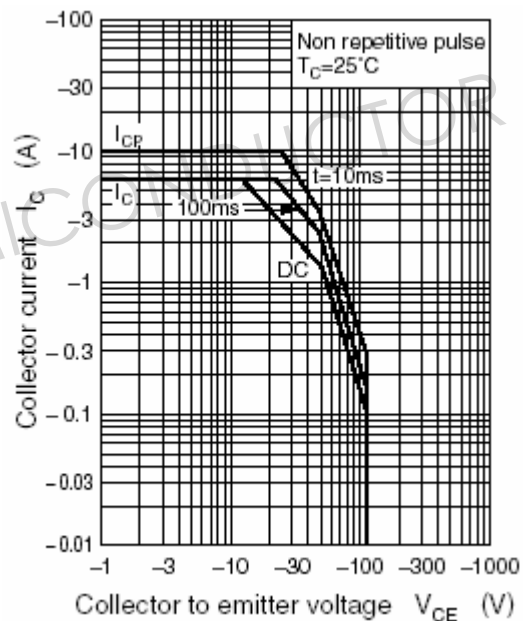


Fig.6 Safe Operating Area