

Silicon PNP Power Transistors

2SA1553

DESCRIPTION

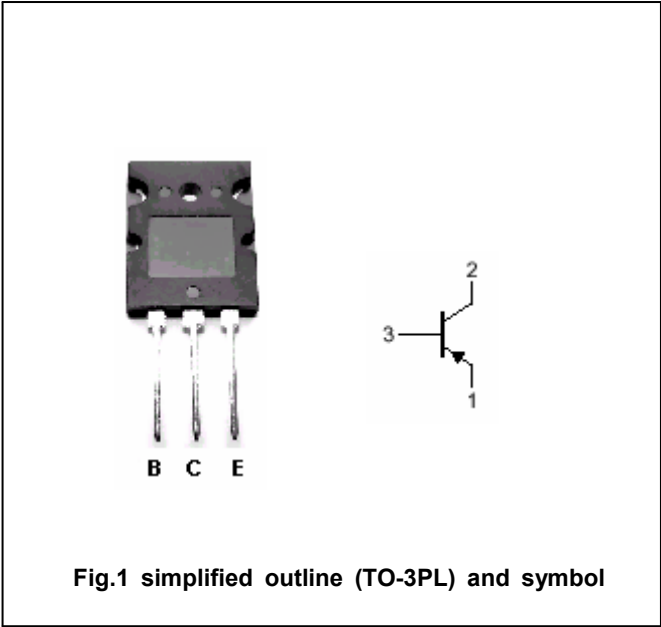
- With TO-3PL package
- Complement to type 2SC4029

APPLICATIONS

- Power amplifier applications
- Recommended for 120W high fidelity audio frequency amplifier output stage

PINNING

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



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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-230	V
$V_{CEO}$	Collector-emitter voltage	Open base	-230	V
$V_{EBO}$	Emitter-base voltage	Open collector	-5	V
$I_C$	Collector current		-15	A
$I_B$	Base current		-1.5	A
$P_C$	Collector power dissipation	$T_C=25^{\circ}\text{C}$	150	W
$T_j$	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
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-50mA ; I_B=0$	-230			V
$V_{CEsat}$	Collector-emitter saturation voltage	$I_C=-8A ; I_B=-0.8A$			-3.0	V
$V_{BE}$	Base-emitter on voltage	$I_C=-7A ; V_{CE}=-5V$			-1.5	V
$I_{CBO}$	Collector cut-off current	$V_{CB}=-230V ; I_E=0$			-5	$\mu A$
$I_{EBO}$	Emitter cut-off current	$V_{EB}=-5V ; I_C=0$			-5	$\mu A$
$h_{FE-1}$	DC current gain	$I_C=-1A ; V_{CE}=-5V$	55		160	
$h_{FE-2}$	DC current gain	$I_C=-7A ; V_{CE}=-5V$	35			
$f_T$	Transition frequency	$I_C=-1A ; V_{CE}=-5V$		25		MHz
$C_{OB}$	Collector output capacitance	$I_C=0 ; f=1MHz ; V_{CB}=-10V$		470		pF

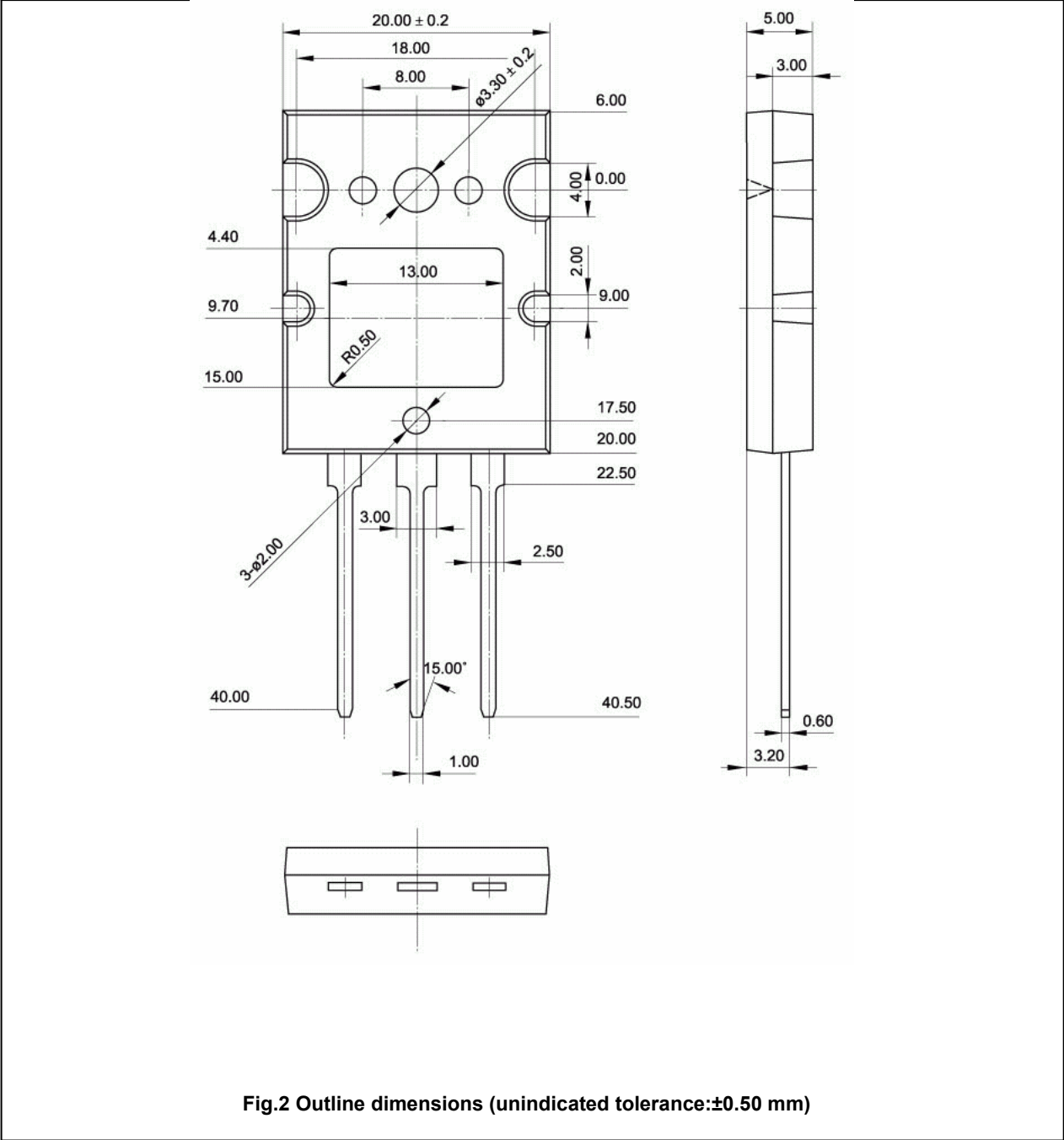
◆  $h_{FE-1}$  classifications

R	O
55-110	80-160

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PACKAGE OUTLINE



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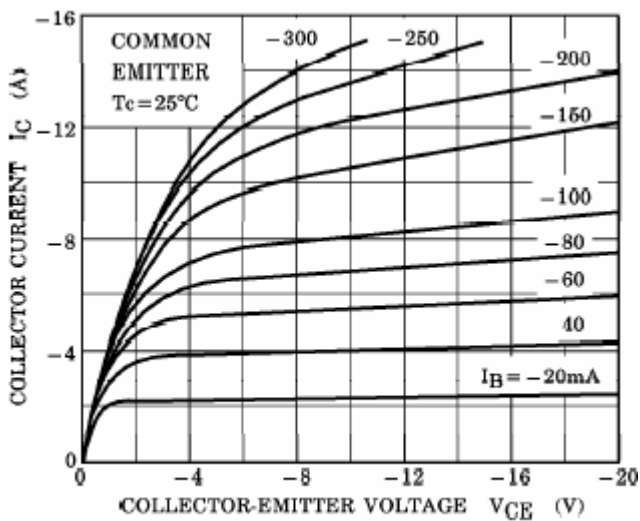


Fig.3 Static Characteristic

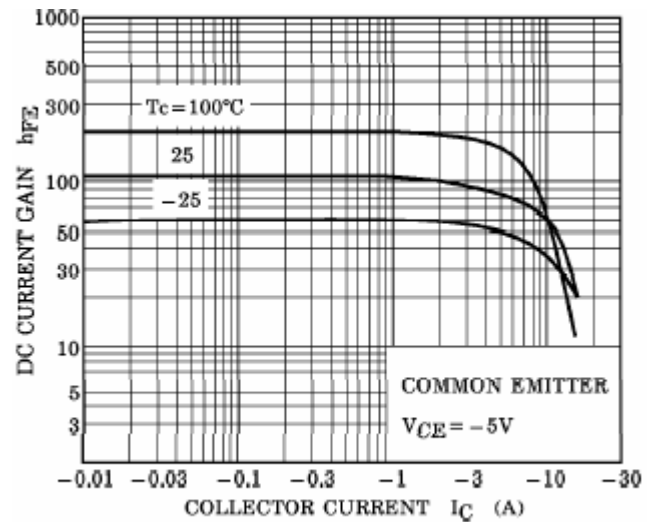


Fig.4 DC current Gain

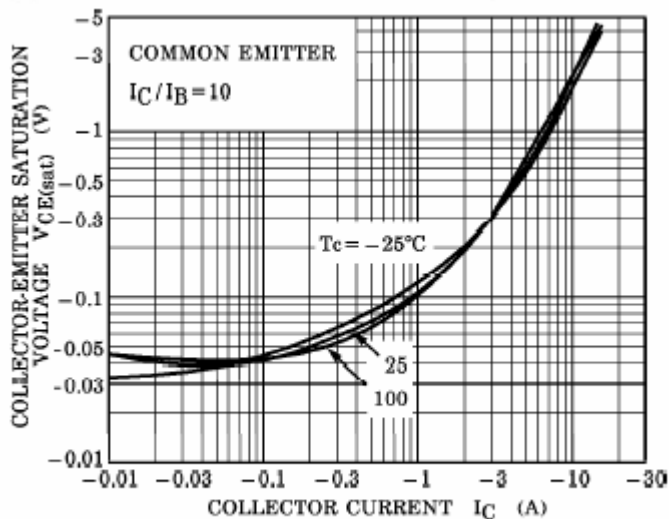


Fig.5 Collector-Emitter Saturation Voltage

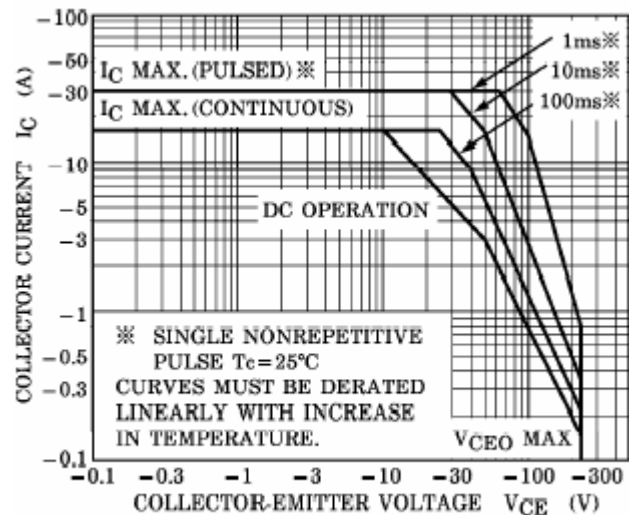


Fig.6 Safe Operating Area