

## Silicon PNP Power Transistors

2SA1249

## DESCRIPTION

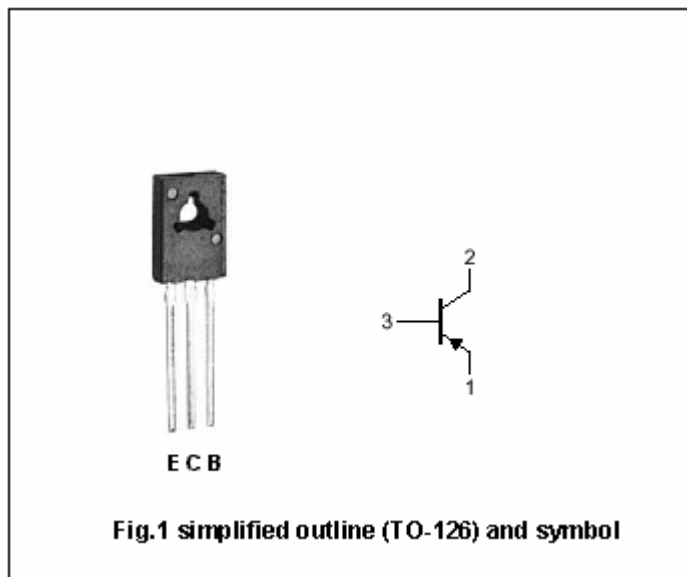
- With TO-126 package
- Complement to type 2SC3117
- High breakdown voltage
- Large current capacity

## APPLICATIONS

- For color TV sound output,converters, Inverters applications

## 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	-180	V
$V_{CEO}$	Collector-emitter voltage	Open base	-160	V
$V_{EBO}$	Emitter-base voltage	Open collector	-6	V
$I_C$	Collector current		-1.5	A
$I_{CM}$	Collector current-Peak		-2.5	A
$P_C$	Collector power dissipation	$T_a=25^\circ\text{C}$	1.0	W
		$T_C=25^\circ\text{C}$	10	
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-55~150	$^\circ\text{C}$

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =-1mA; R <sub>BE</sub> =∞		-160		V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =-10μA; I <sub>E</sub> =0		-180		V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-10μA; I <sub>C</sub> =0		-6		V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-500mA; I <sub>B</sub> =-50mA		-0.2	-0.5	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =-500mA; I <sub>B</sub> =-50mA		-0.85	-1.2	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-120V; I <sub>E</sub> =0			-1.0	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-4V; I <sub>C</sub> =0			-1.0	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-100mA; V <sub>CE</sub> =-5V	100		400	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-10mA; V <sub>CE</sub> =-5V	90			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-50mA; V <sub>CE</sub> =-10V		120		MHz
C <sub>ob</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =-10V; f=1MHz		22		pF

◆ h<sub>FE-1</sub> Classifications

R	S	T
100-200	140-280	200-400



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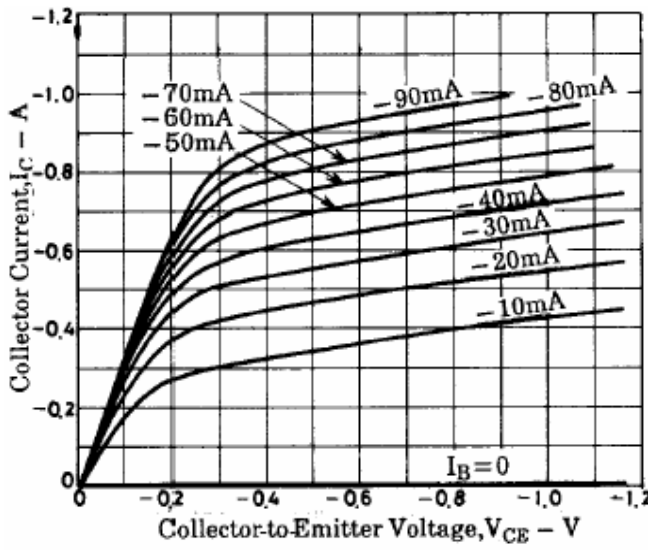


Fig.3 Static Characteristic

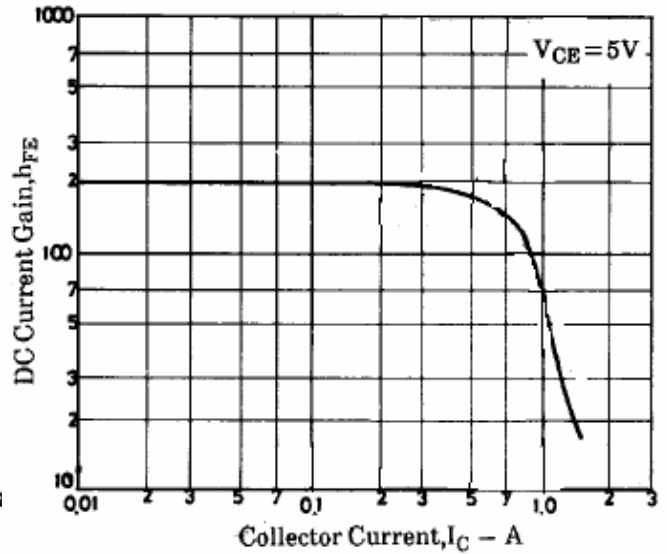


Fig.4 DC current Gain

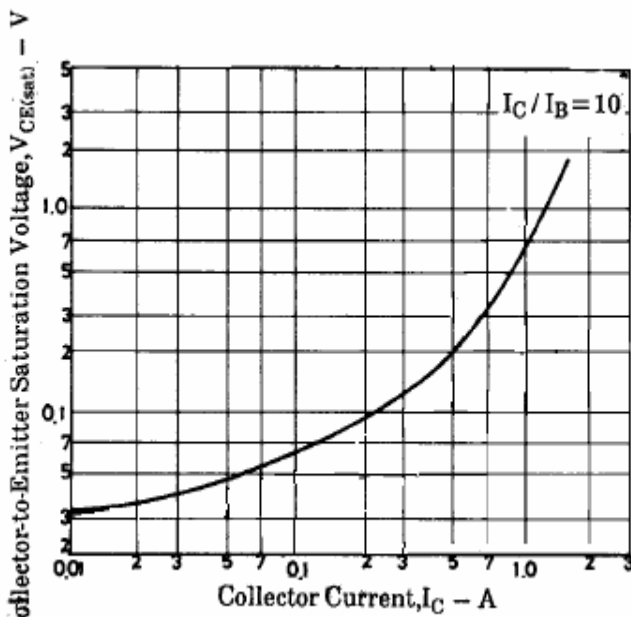


Fig.5 Collector-Emitter Saturation Voltage

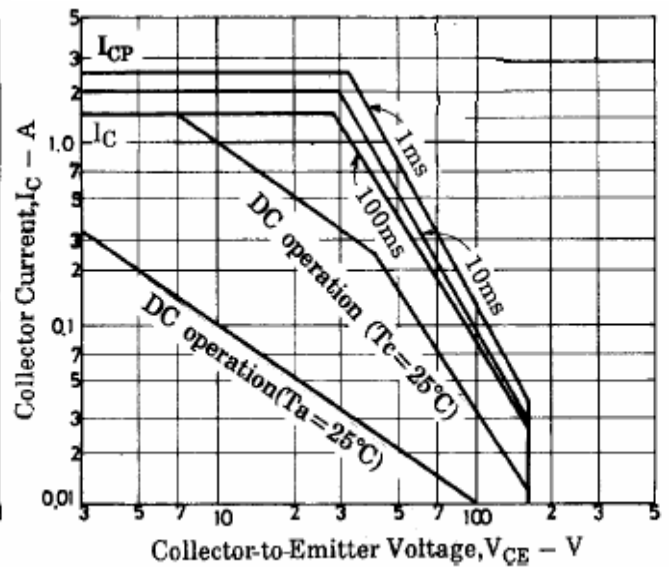


Fig.6 Safe Operating Area