Silicon PNP Power Transistors 2SA1209

DESCRIPTION

- With TO-126 package
- Complement to type 2SC2911
- High breakdown voltage
- Fast switching speed

APPLICATIONS

- High-voltage switching and AF 100W predriver applications

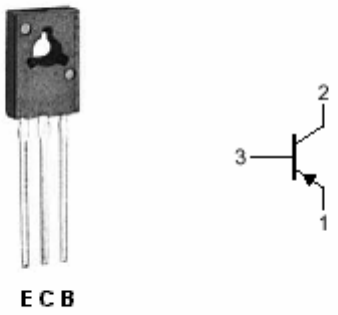

Fig.1 simplified outline (TO-126) and symbol

PINNING

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

Absolute maximum ratings(Ta=25℃)

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	-5	V
I_C	Collector current		-0.14	A
I_{CM}	Collector current-Peak		-0.20	A
P_C	Collector power dissipation	T_a=25℃	1.0	W
		T_C=25℃	10	
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CEsat}	Collector-emitter saturation voltage	I_C=-50mA; I_B=-5mA			-0.4	V
I_{CBO}	Collector cut-off current	V_{CB}=-80V; I_E=0			-0.1	μA
I_{EBO}	Emitter cut-off current	V_{EB}=-4V; I_C=0			-0.1	μA
h_{FE}	DC current gain	I_C=-10mA ; V_{CE}=-5V	100		400	
f_T	Transition frequency	I_C=-10mA ; V_{CE}=-10V		150		MHz
C_{ob}	Output capacitance	I_E=0 ; V_{CB}=-10V;f=1MHz		4.0		pF
Switching times resistive load						
t_{on}	Turn-on time	I_C=10mA I_{B1}=-I_{B2}=1mA		0.1		μs
t_s	Storage time			1.5		μs
t_f	Fall time			0.1		μs

◆ **h_{FE} Classifications**

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

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PACKAGE OUTLINE

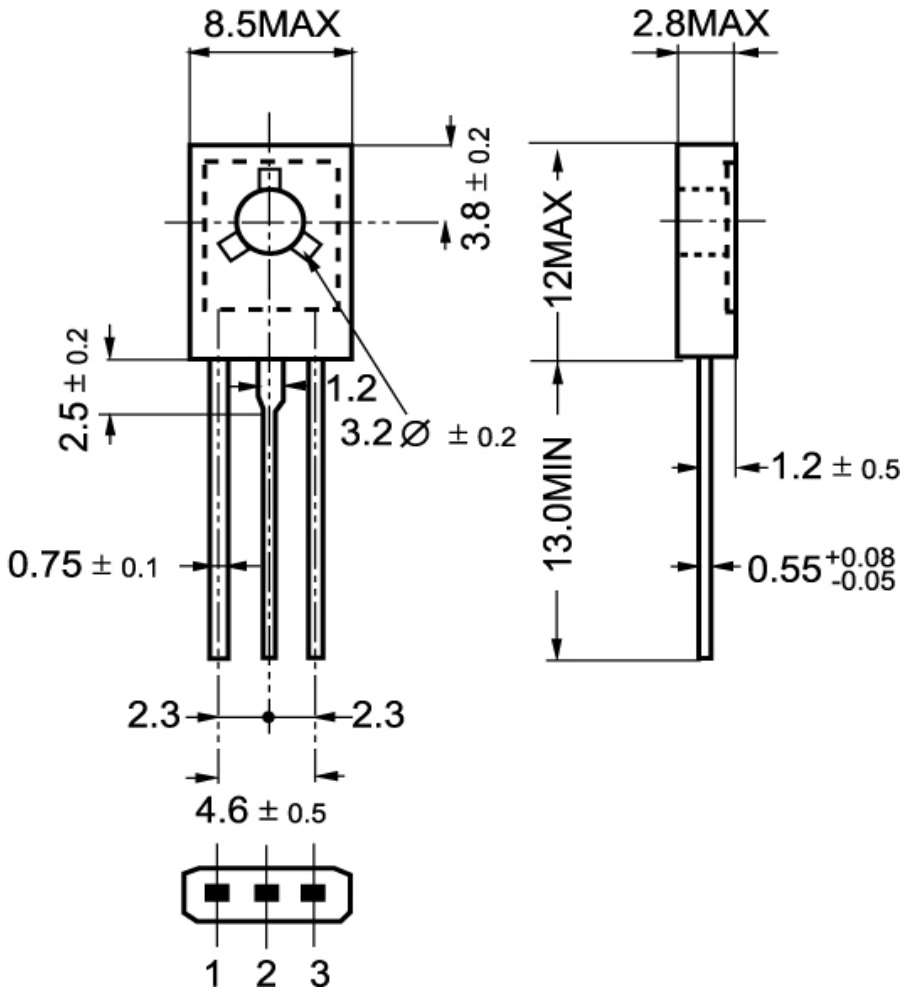

Fig.2 Outline dimensions

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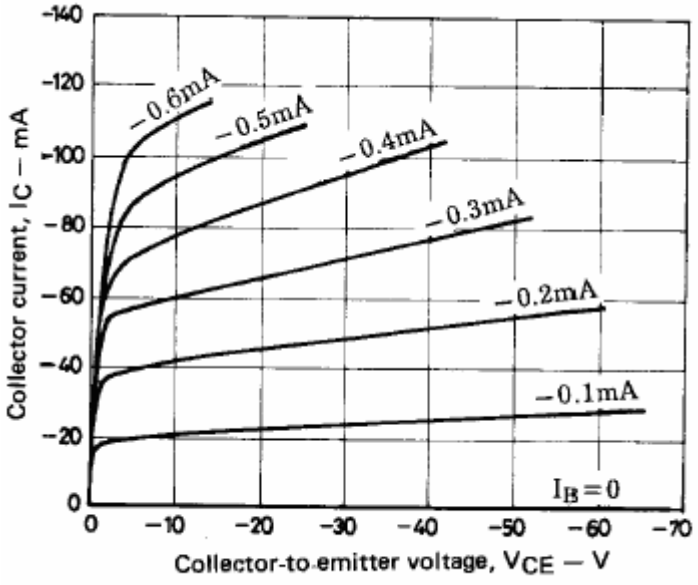

Fig.3 Static Characteristic

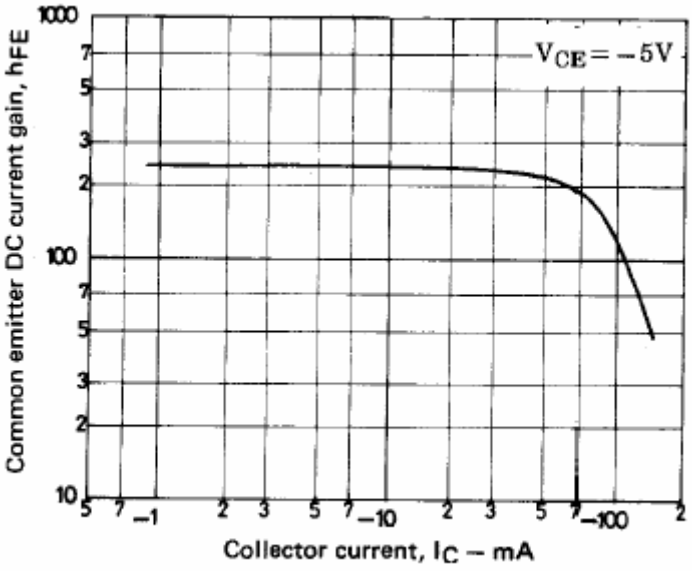

Fig.4 DC current Gain

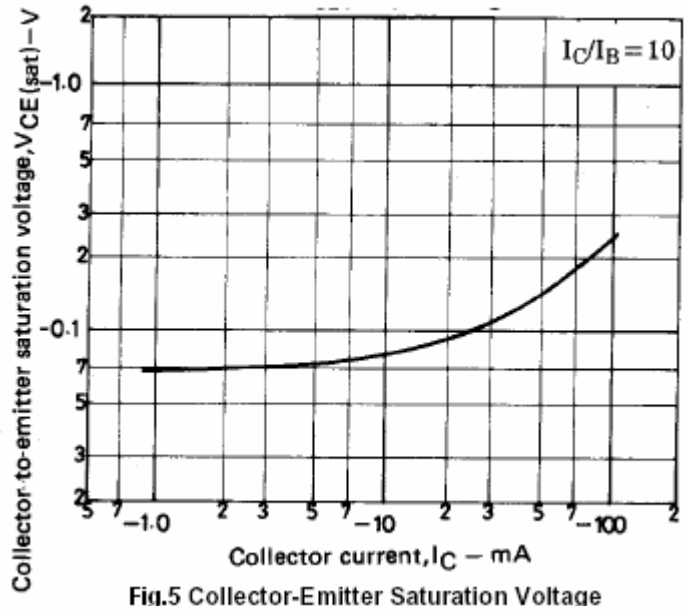

Fig.5 Collector-Emitter Saturation Voltage

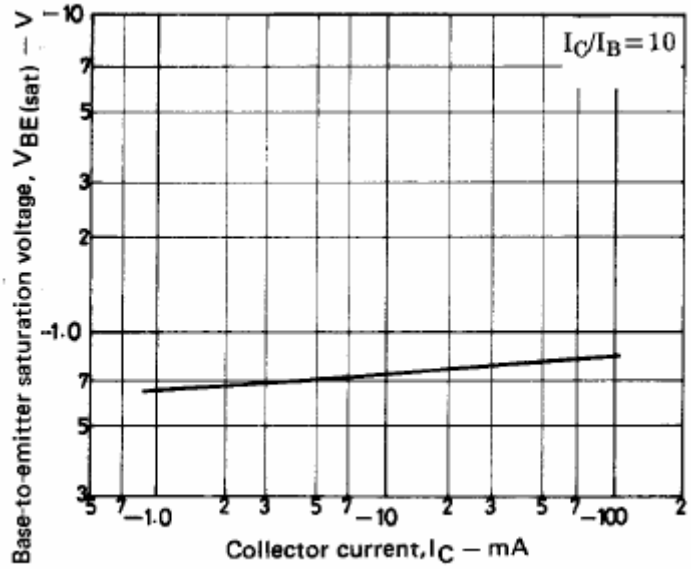

Fig.6 Base-Emitter Saturation Voltage

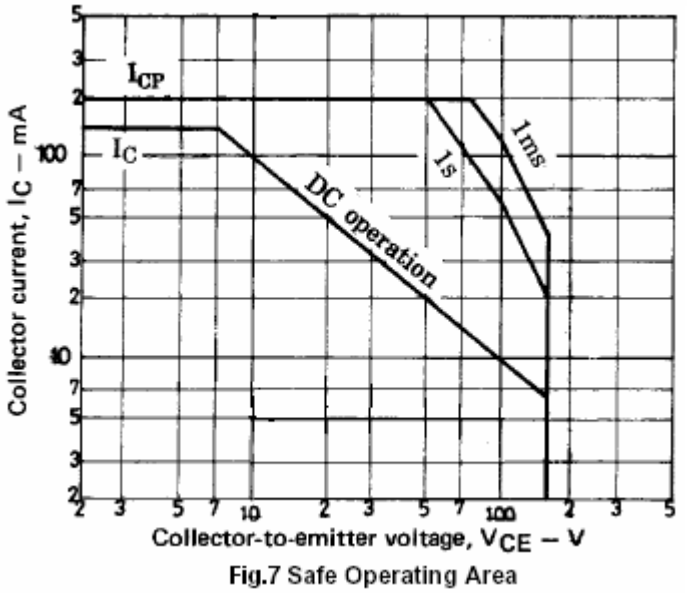

Fig.7 Safe Operating Area