

Silicon NPN Power Transistors

2SC2899

DESCRIPTION

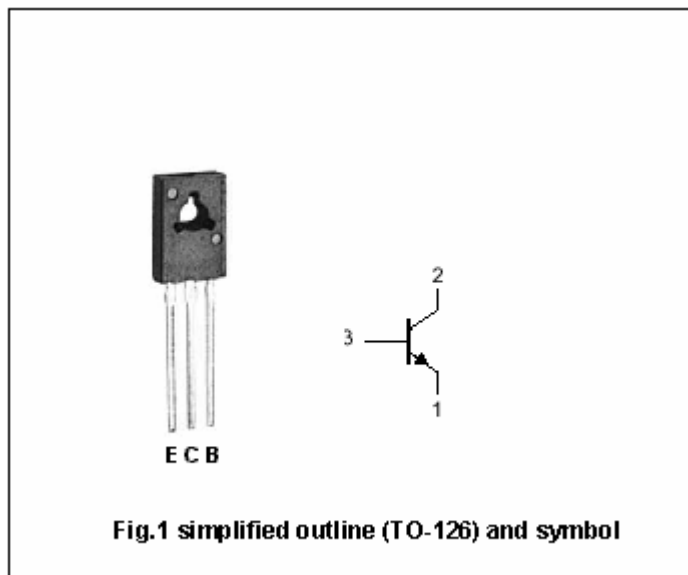
- With TO-126 package
- High voltage,high speed

APPLICATIONS

- For high speed and high voltage switching applications

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base



Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	500	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	10	V
I_C	Collector current		0.5	A
I_{CM}	Collector current-peak		1.0	A
P_C	Collector power dissipation	$T_a=25^{\circ}\text{C}$	0.75	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_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(SUS)}	Collector-emitter sustaining voltage	I _C =0.1A; R _{BE} =∞, L=100mH	400			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =10mA; I _C =0	10			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =250mA; I _B =50m A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =250mA ; I _B =50m A			1.5	V
h _{FE-1}	DC current gain	I _C =250mA ; V _{CE} =5V	15			
h _{FE-2}	DC current gain	I _C =500mA ; V _{CE} =5V	7			
I _{CBO}	Collector cut-off current	V _{CB} =400V; I _E =0			20	μ A
I _{CEO}	Collector cut-off current	V _{CE} =350V; R _{BE} =∞			50	μ A

Switching times

t _{on}	Turn-on time	I _C =0.5A; I _{B1} =-I _{B2} =0.1A V _{CC} ≈150V			1.0	μ s
t _{stg}	Storage time				2.0	μ s
t _f	Fall time				1.0	μ s

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PACKAGE OUTLINE

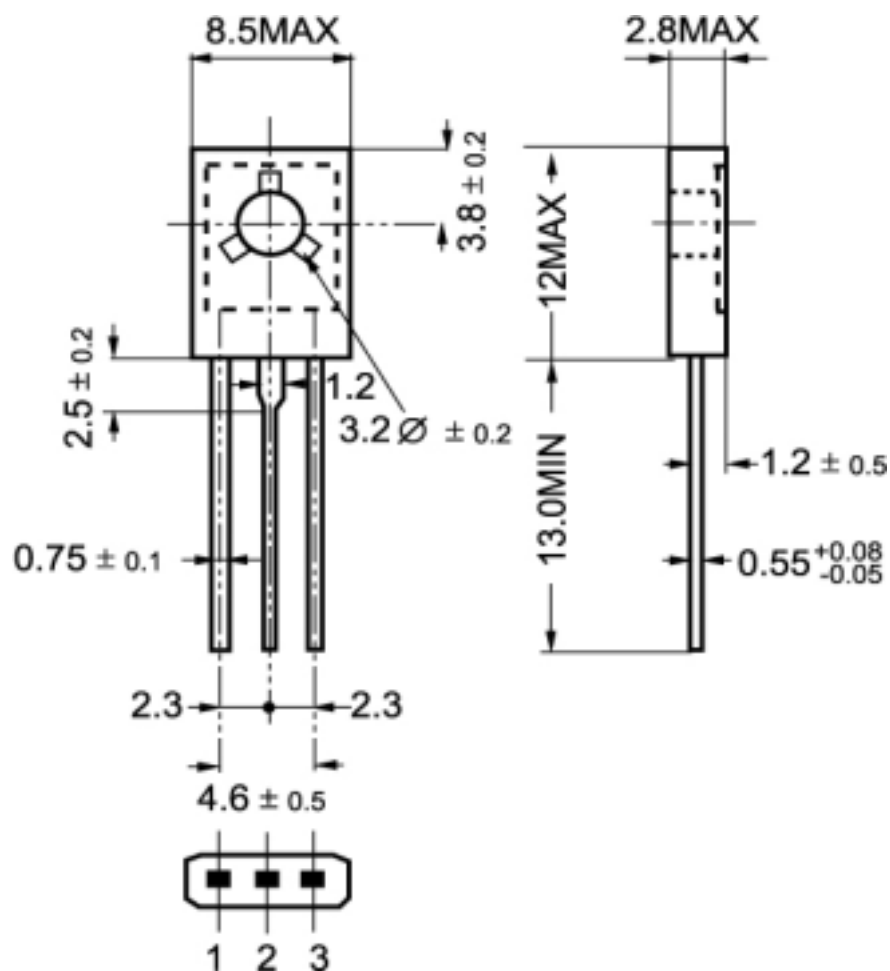


Fig.2 outline dimensions

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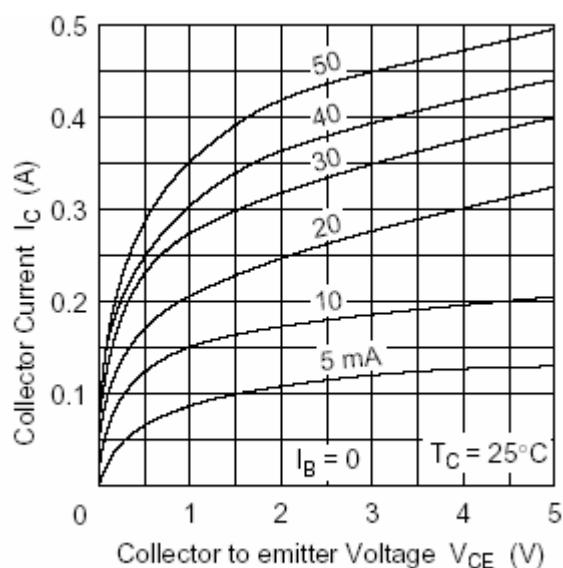


Fig.3 Static Characteristic

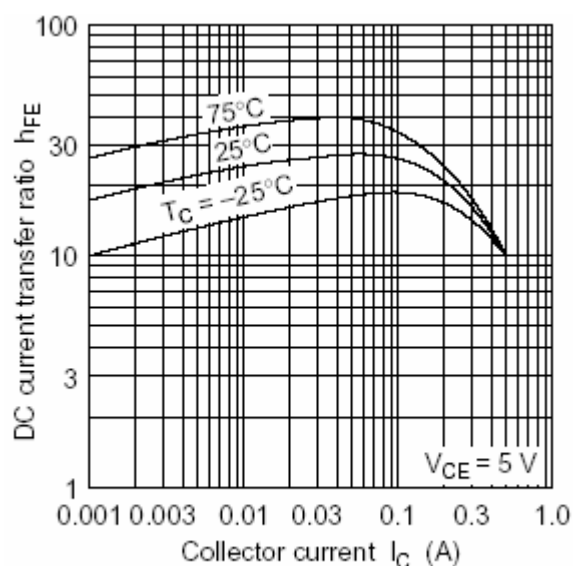


Fig.4 DC current Gain

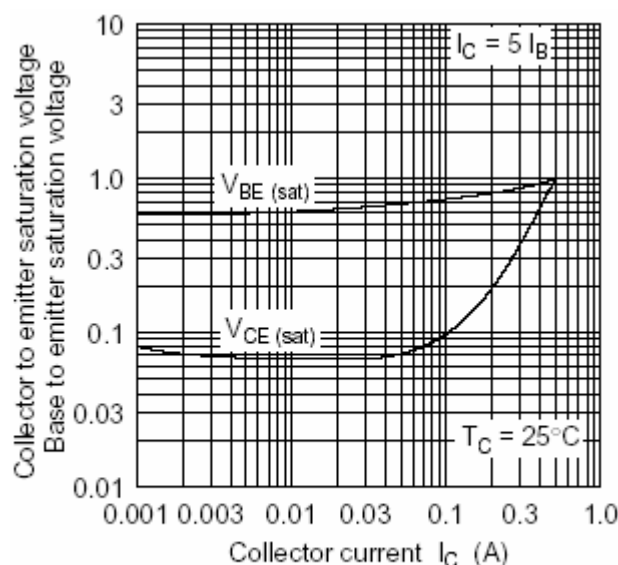
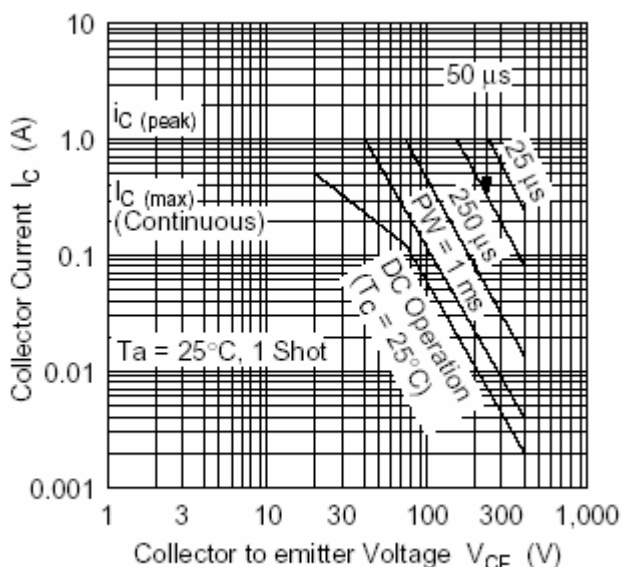
Fig.5 Base-Emitter Saturation Voltage
Collector-Emmitter Saturation Voltage

Fig.6 Safe Operating Area