

SavantIC Semiconductor

Product Specification

Silicon NPN Power Transistors

2SD826

DESCRIPTION

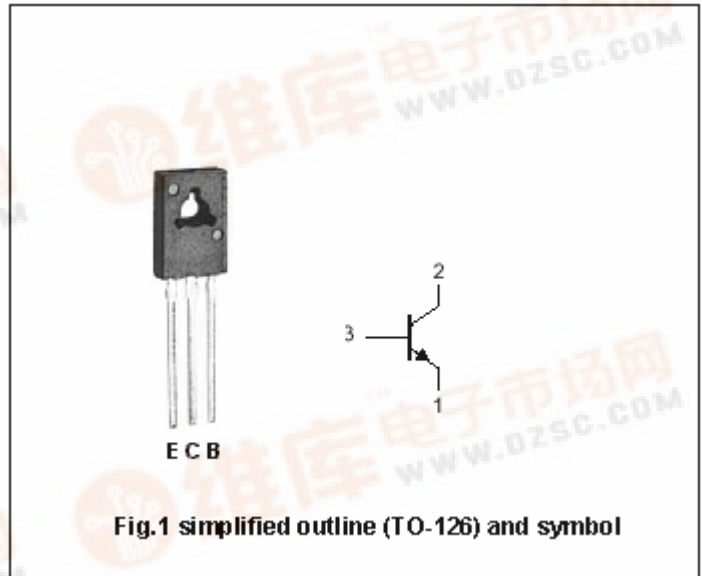
- With TO-126 package
- Low collector saturation voltage
- High DC current gain
- Large current capacity

APPLICATIONS

- For 3V, 6V strobe applications

PINNING

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



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	60	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	20	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	6	V
I <sub>C</sub>	Collector current		5	A
I <sub>CM</sub>	Collector current-peak	t=100ms	8	A
P <sub>C</sub>	Collector power dissipation	T <sub>a</sub> =25°C	1.0	W
		T <sub>c</sub> =25°C	10	
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-55~150	°C

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =3A; I <sub>B</sub> =60mA(pulse)			0.5	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =3A; I <sub>B</sub> =60mA(pulse)			1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =50V; I <sub>E</sub> =0			1.0	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			1.0	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =0.5A; V <sub>CE</sub> =2V	120		560	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =3A; V <sub>CE</sub> =2V(pulse)	95			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =50mA; V <sub>CE</sub> =10V		120		MHz
C <sub>OB</sub>	Collector output capacitance	f=1MHz; V <sub>CB</sub> =10V		45		pF

## Switching times

t <sub>on</sub>	Turn-on time	I <sub>C</sub> =2A; I <sub>B1</sub> =-I <sub>B2</sub> =0.2A V <sub>CC</sub> =10V; R <sub>L</sub> =5Ω		30		ns
t <sub>stg</sub>	Storage time			300		ns
t <sub>f</sub>	Fall time			40		ns

◆ h<sub>FE-1</sub> Classifications

E	F	G
120-200	160-320	280-560

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PACKAGE OUTLINE

