

Silicon NPN Power Transistors

2SC2752

DESCRIPTION

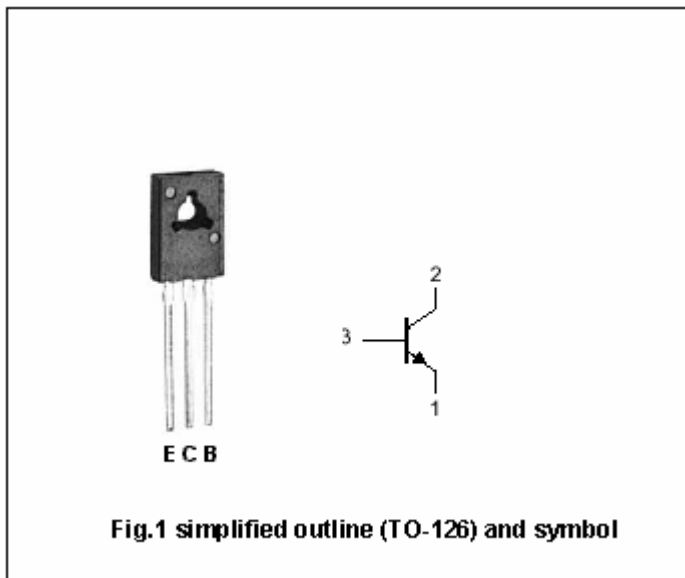
- With TO-126 package
- High breakdown voltage
- Low collector saturation voltage

APPLICATIONS

- Low power switching regulator
- DC-DC converter
- High voltage switch

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	500	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	400	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	7	V
I <sub>C</sub>	Collector current		0.5	A
I <sub>CM</sub>	Collector current-peak		1.0	A
I <sub>B</sub>	Base current		0.25	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>CEO(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =0.3A; I <sub>B1</sub> =0.06A, L=10mH	400			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =300mA; I <sub>B</sub> =60mA			1.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =300mA; I <sub>B</sub> =60mA			1.2	V
I <sub>CEX</sub>	Collector cut-off current	V <sub>CE</sub> =400V; V <sub>BE</sub> =-1.5V T <sub>C</sub> =125°C			0.01 1.0	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			10	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =50mA; V <sub>CE</sub> =5V	20		80	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =300mA; V <sub>CE</sub> =5V	10			

## Switching times

t <sub>on</sub>	Turn-on time	I <sub>C</sub> =300mA; I <sub>B1</sub> =-I <sub>B2</sub> =60mA PW≈50μs; V <sub>CC</sub> ≈150V R <sub>L</sub> =500Ω			1.0	μs
t <sub>stg</sub>	Storage time				2.5	μs
t <sub>f</sub>	Fall time				1.0	μs

◆ h<sub>FE-1</sub> Classifications

M	L	K
20-40	30-60	40-80

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PACKAGE OUTLINE

