

**Inchange Semiconductor**

**Product Specification**

**Silicon NPN Power Transistors**

**2SC1568**

**DESCRIPTION**

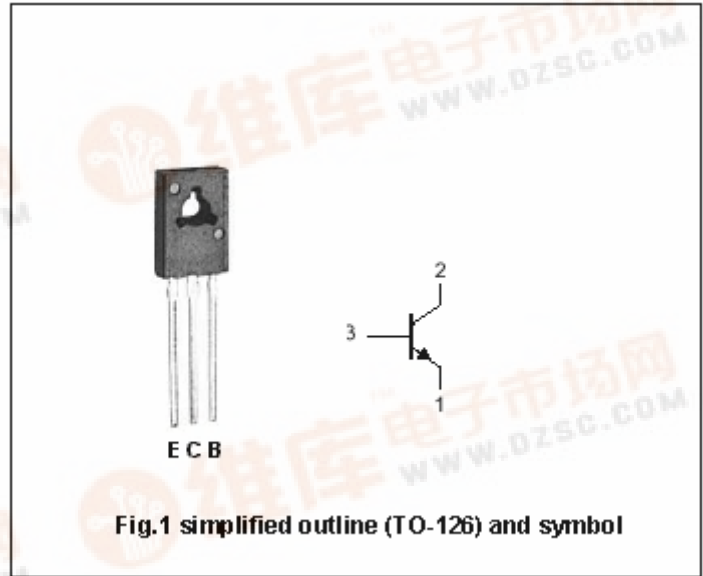
- With TO-126 package
- Complement to type 2SA900
- Low collector saturation voltage

**APPLICATIONS**

- For low voltage type medium output power amplification

**PINNING**

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base



**Absolute maximum ratings (Ta=25°C)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	18	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	18	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	5	V
I <sub>C</sub>	Collector current		1	A
I <sub>CM</sub>	Collector current-peak		2	A
P <sub>C</sub>	Collector power dissipation	T <sub>a</sub> =25°C	1.2	W
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> =1A ; I <sub>B</sub> =50m A			0.5	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =0.5A ; I <sub>B</sub> =50m A			1.2	V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =10 μ A; I <sub>E</sub> =0	18			V
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =1mA; I <sub>B</sub> =0	18			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =10 μ A; I <sub>C</sub> =0	5			V
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =500mA ; V <sub>CE</sub> =2V	90		280	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =1.5A ; V <sub>CE</sub> =2V	50			
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =10V ; I <sub>E</sub> =0			1	μ A
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =18V ; I <sub>B</sub> =0			10	μ A
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =6V; f=1MHz		12		pF
f <sub>T</sub>	Transition frequency	I <sub>E</sub> =-50mA ; V <sub>CB</sub> =6V; f=200MHz		150		MHz

◆ h<sub>FE-1</sub> classifications

Q	R	S
90-155	130-210	180-280

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PACKAGE OUTLINE

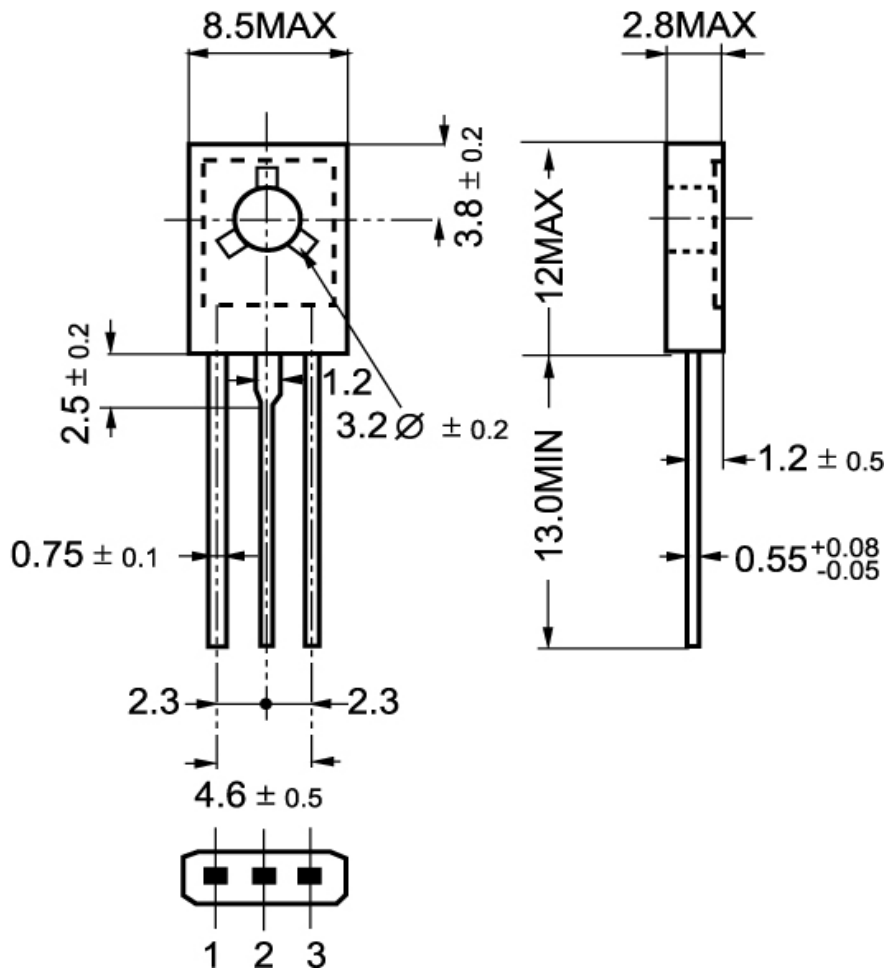


Fig.2 outline dimensions

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