

Inchange Semiconductor

Product Specification

Silicon NPN Power Transistors

2SC1449

DESCRIPTION

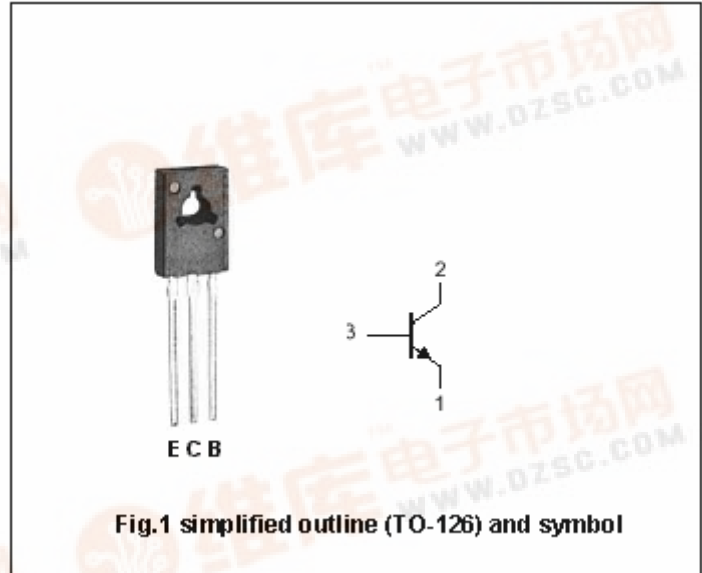
- With TO-126 package
- Low collector saturation voltage

APPLICATIONS

- Low frequency power amplification
- High frequency 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	40	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	35	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	5	V
I <sub>C</sub>	Collector current		2	A
I <sub>B</sub>	Base current		1	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>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =100 μ A; I <sub>E</sub> =0	40			V
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =10mA; I <sub>B</sub> =0	35			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =100 μ A; I <sub>C</sub> =0	5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =500mA ; I <sub>B</sub> =50m A			0.7	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =500mA ; I <sub>B</sub> =50m A			1.5	V
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =300mA ; V <sub>CE</sub> =2V	40		250	
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =35V; I <sub>E</sub> =0			0.5	μ A
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =4V; I <sub>C</sub> =0			0.5	μ A
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =10V; f=1MHz		20		pF
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =100mA ; V <sub>CE</sub> =5V		55		MHz

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PACKAGE OUTLINE

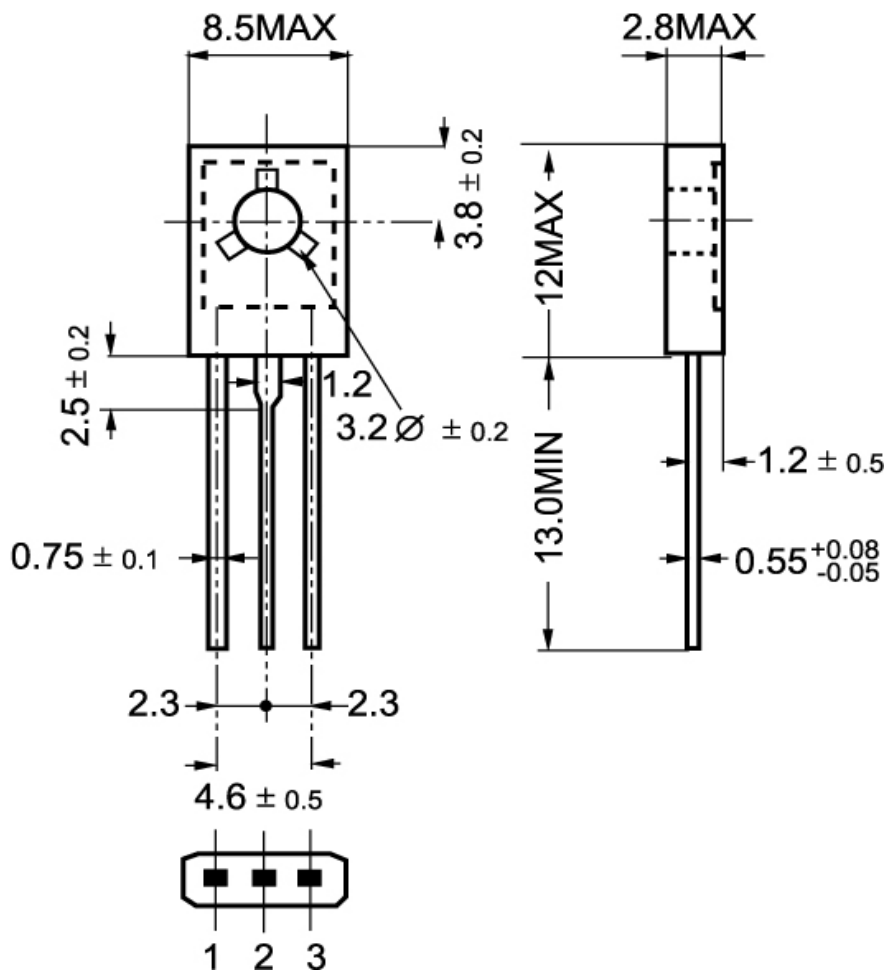


Fig.2 outline dimensions