

**Silicon NPN Power Transistors**

**2SC1079 2SC1080**

**DESCRIPTION**

- With TO-3 package
- Complement to type 2SA679/680
- High power dissipation

**APPLICATIONS**

- For audio power amplifier applications

**PINNING(see Fig.2)**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

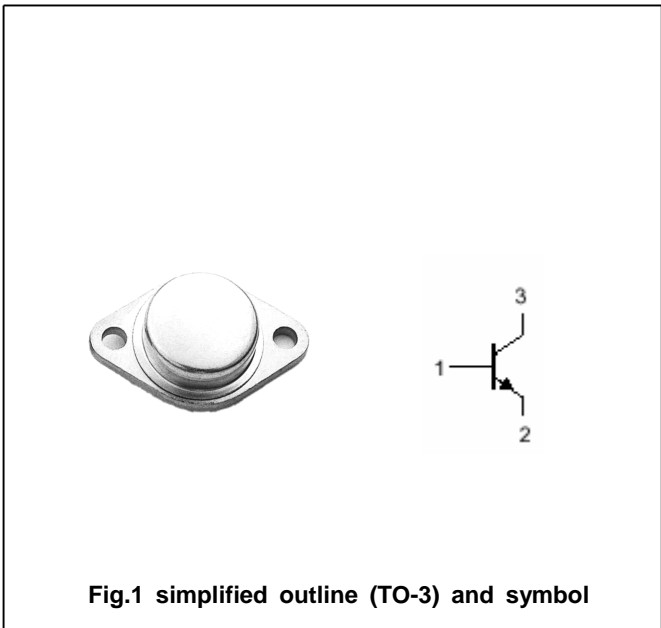


Fig.1 simplified outline (TO-3) and symbol

**Absolute maximum ratings(Ta=?)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	2SC1079	120	V
		2SC1080	100	
V <sub>CEO</sub>	Collector-emitter voltage	2SC1079	120	V
		2SC1080	100	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	5	V
I <sub>C</sub>	Collector current		12	A
I <sub>E</sub>	Emitter current		-12	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25°	100	W
T <sub>j</sub>	Junction temperature		150	°
T <sub>stg</sub>	Storage temperature		-65~150	°

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## CHARACTERISTICS

T<sub>j</sub>=25? unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	2SC1079	I <sub>C</sub> =0.1A ; I <sub>B</sub> =0	120			V
		2SC1080		100			
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =10mA ; I <sub>C</sub> =0	5			V	
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =10A ; I <sub>B</sub> =1A			3.0	V	
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =10A ; V <sub>CE</sub> =5V			2.5	V	
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =50V ; I <sub>E</sub> =0			0.1	mA	
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V ; I <sub>C</sub> =0			0.1	mA	
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =2A ; V <sub>CE</sub> =5V	40		140		
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =7A ; V <sub>CE</sub> =5V	15				
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =2A ; V <sub>CE</sub> =5V		4		MHz	

U **h<sub>FE-1</sub> Classifications**

R	Y
40-80	70-140

PACKAGE OUTLINE

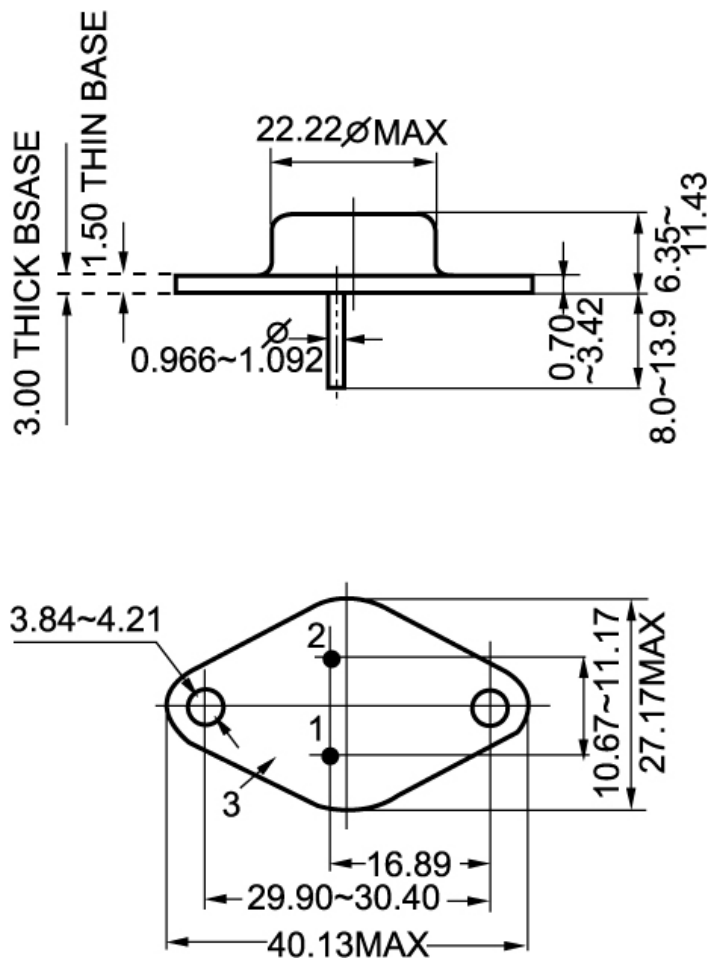


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)