

**Silicon NPN Power Transistors****2SC3223****DESCRIPTION**

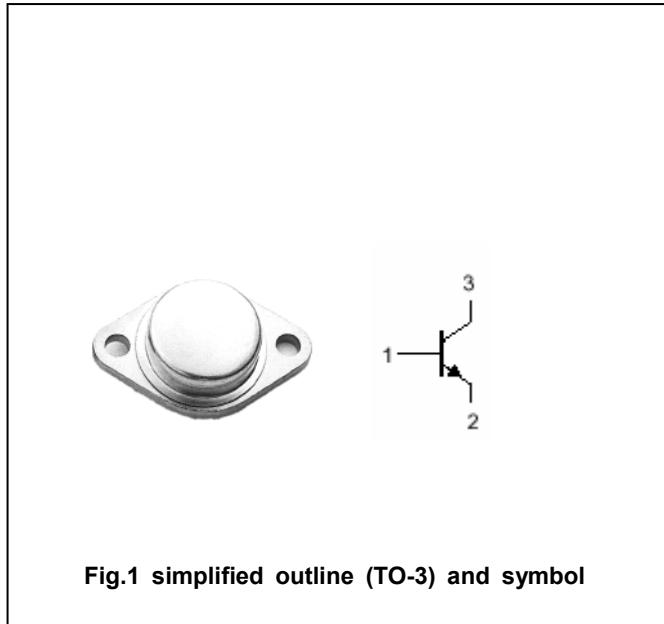
- With TO-3 package
- High speed,high current
- Low saturation voltage

**APPLICATIONS**

- For high current high speed,high power applications

**PINNING (See Fig.2)**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

**Absolute maximum ratings(Ta=25°C)**

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	230	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	200	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	7	V
I <sub>C</sub>	Collector current		20	A
I <sub>B</sub>	Base current		7	A
P <sub>T</sub>	Total power dissipation	T <sub>mb</sub> =25°C	200	W
T <sub>j</sub>	Junction temperature		200	°C
T <sub>stg</sub>	Storage temperature		-65~200	°C

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	VALUE	UNIT
R <sub>th,j-mb</sub>	Thermal resistance from junction to mounting base	0.62	°C/W

**Silicon NPN Power Transistors****2SC3223****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> =0.2A ; I <sub>B</sub> =0	200			V
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =10A; I <sub>B</sub> =1A			1.0	V
V <sub>BE(sat)</sub>	Base-emitter saturation voltage	I <sub>C</sub> =10A; I <sub>B</sub> =1A			1.5	V
I <sub>CBO</sub>	Collector cut-off current	At rated voltage			0.1	mA
I <sub>CEO</sub>	Collector cut-off current	At rated voltage			0.1	mA
I <sub>EBO</sub>	Emitter cut-off current	At rated voltage			0.1	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =20A ; V <sub>CE</sub> =2V	10			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =2A ; V <sub>CE</sub> =10V		20		MHz

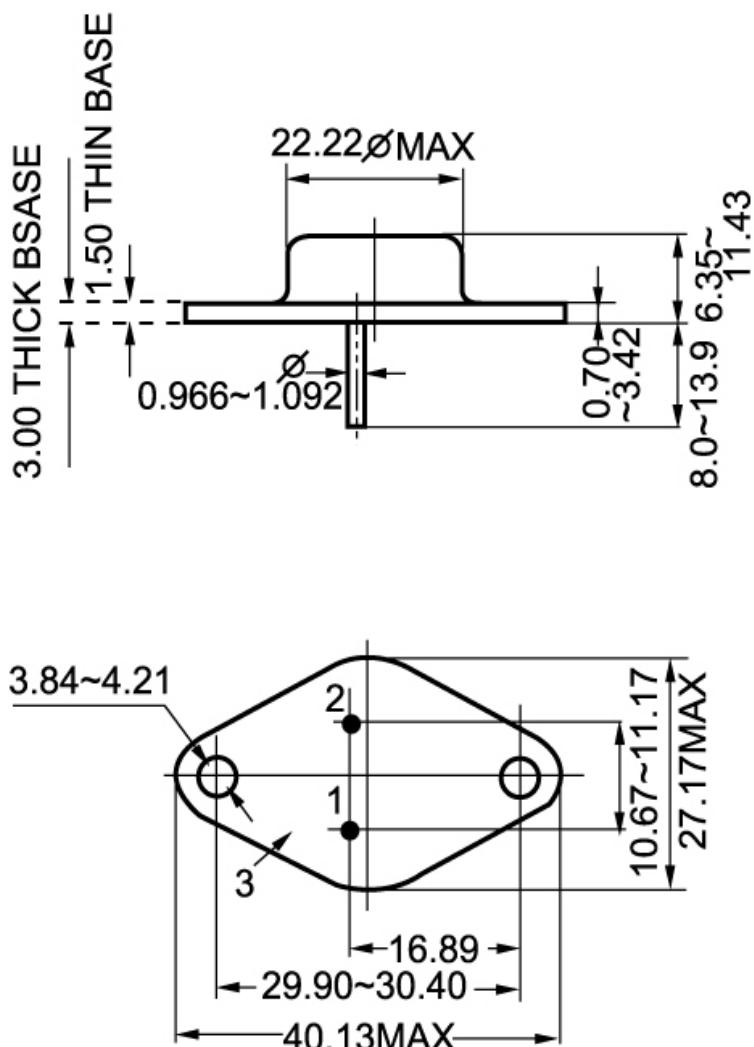
**Silicon NPN Power Transistors****2SC3223****PACKAGE OUTLINE**

Fig.2 Outline dimensions