

**Silicon NPN Power Transistors****2N6322****DESCRIPTION**

- With TO-3 package
- High current and high power capability
- Low collector saturation voltage

**APPLICATIONS**

- For use in high current ,high power applications

**PINNING**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

**Fig.1 simplified outline (TO-3) and symbol****Absolute maximum ratings(Ta=□)**

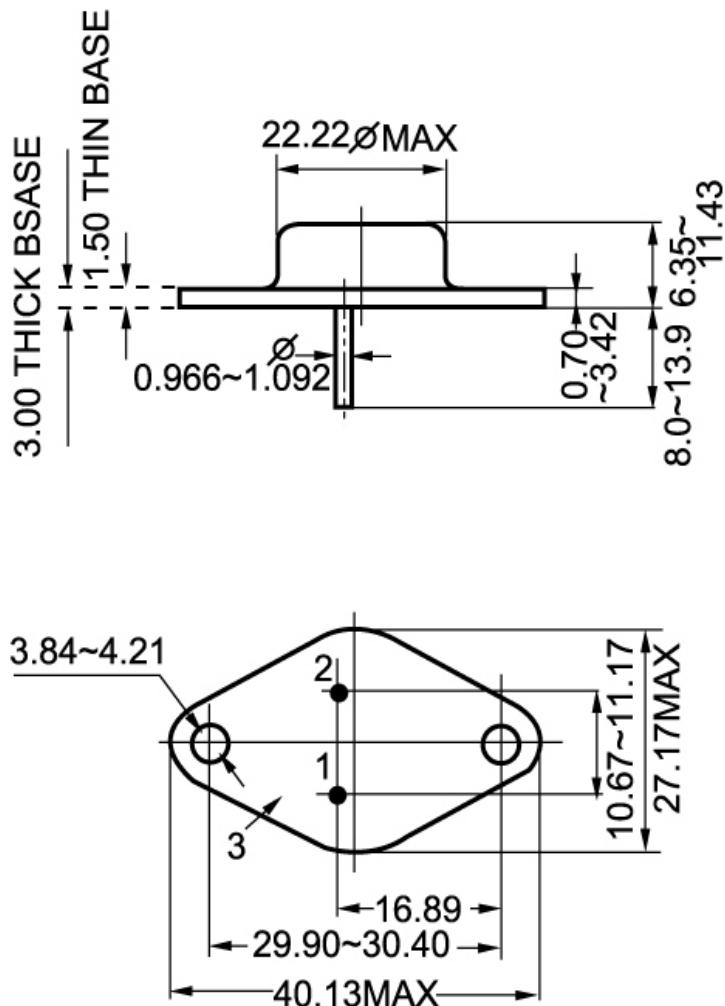
SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	300	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	200	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	5	V
I <sub>C</sub>	Collector current		30	A
I <sub>B</sub>	Base current		10	A
P <sub>D</sub>	Total Power Dissipation	T <sub>C</sub> =25□	200	W
T <sub>j</sub>	Junction temperature		200	□
T <sub>stg</sub>	Storage temperature		-65~200	□

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	VALUE	UNIT
R <sub>th j-c</sub>	Thermal resistance junction to case	0.5	□/W

**Silicon NPN Power Transistors****2N6322****CHARACTERISTICS**T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =30mA ; I <sub>B</sub> =0	200			V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =2mA ; I <sub>E</sub> =0	300			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =2mA ; I <sub>C</sub> =0	5			V
V <sub>CEsat-1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =20A ; I <sub>B</sub> =2A			1.5	V
V <sub>CEsat-2</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =30A; I <sub>B</sub> =6A			3.0	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =30A ; V <sub>CE</sub> =5V			2.5	V
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =100V; I <sub>B</sub> =0			2.0	mA
I <sub>CES</sub>	Collector cut-off current	V <sub>CE</sub> =300V; V <sub>BE</sub> =0			20	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			20	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =5A ; V <sub>CE</sub> =5V	40		150	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =20A ; V <sub>CE</sub> =5V	12			
h <sub>FE-3</sub>	DC current gain	I <sub>C</sub> =30A ; V <sub>CE</sub> =5V	6			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =1A ; V <sub>CE</sub> =10V	10			MHz

**Silicon NPN Power Transistors****2N6322****PACKAGE OUTLINE**Fig.2 outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$ )