

Inchange Semiconductor

Product Specification

Silicon NPN Power Transistors

2SC1672

DESCRIPTION

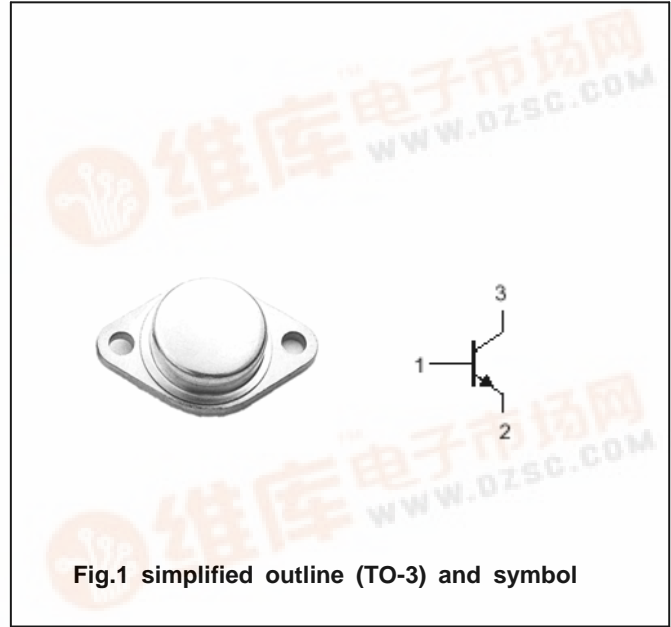
- With TO-3 package
- High current capability
- Fast switching speed

APPLICATIONS

- Motor control
- Linear and switching applications

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	150	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	120	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	6	V
I <sub>C</sub>	Collector current		25	A
I <sub>CM</sub>	Collector current-peak		30	A
P <sub>T</sub>	Total power dissipation	T <sub>C</sub> =25°C	120	W
T <sub>j</sub>	Junction temperature		175	°C
T <sub>stg</sub>	Storage temperature		-55~175	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal resistance junction to case	1.17	°C/W

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## CHARACTERISTICS

 $T_j=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.1\text{A}; I_B=0$	120			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1\text{mA}; I_C=0$	6			V
$V_{CEsat-1}$	Collector-emitter saturation voltage	$I_C=10\text{A}; I_B=1\text{A}$			0.6	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	$I_C=20\text{A}; I_B=2\text{A}$			1.2	V
$V_{BEsat}$	Base-emitter saturation voltage	$I_C=20\text{A}; I_B=2\text{A}$			2.0	V
$I_{CBO}$	Collector cut-off current	$V_{CB}=150\text{V}; I_E=0$			0.1	mA
$I_{EBO}$	Emitter cut-off current	$V_{EB}=6\text{V}; I_C=0$			0.1	mA
$h_{FE-1}$	DC current gain	$I_C=13\text{A}; V_{CE}=2\text{V}$	20		100	
$h_{FE-2}$	DC current gain	$I_C=20\text{A}; V_{CE}=4\text{V}$	10			

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PACKAGE OUTLINE

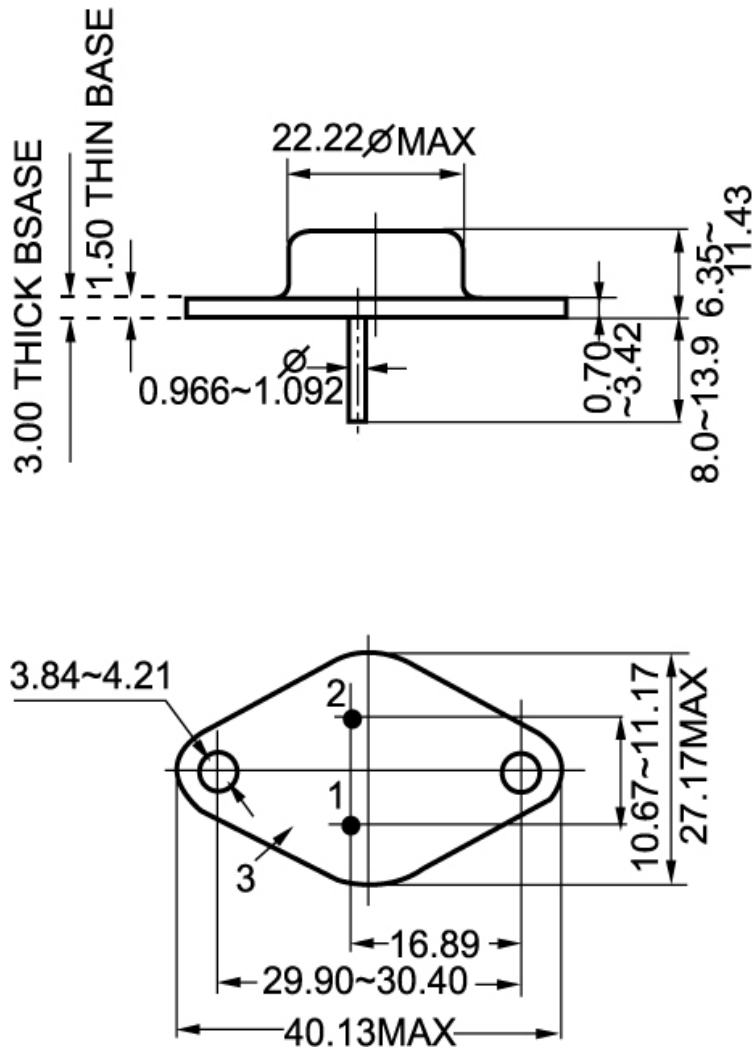


Fig.2 Outline dimensions