

## Silicon NPN Power Transistors

## 2N6674 2N6675

## DESCRIPTION

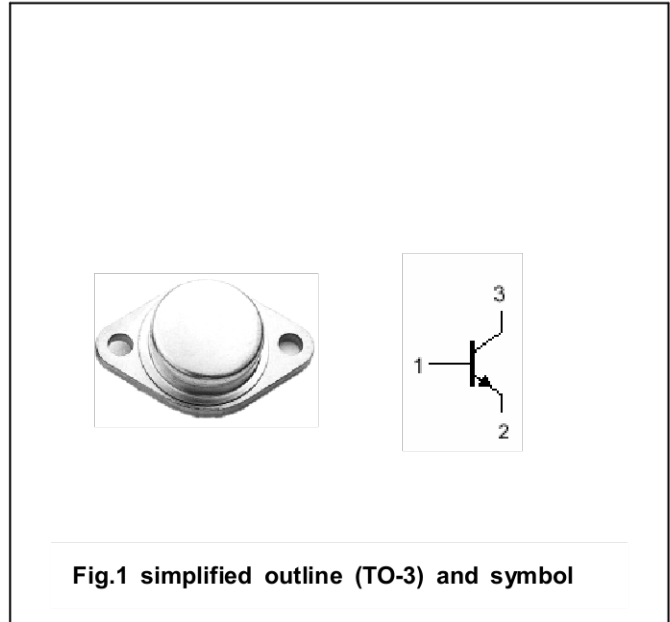
- With TO-3 package
- High voltage,high speed

## APPLICATIONS

- Switching regulators
- Inverters
- Solenoid and relay drivers
- Deflection circuits

## PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings( $T_a =$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	2N6674	450	V
		2N6675	650	
$V_{CEO}$	Collector-emitter voltage	2N6674	300	V
		2N6675	400	
$V_{EBO}$	Emitter-base voltage	Open collector	7	V
$I_C$	Collector current		15	A
$I_B$	Base current		5	A
$P_T$	Total Power Dissipation	$T_a=25$	6	W
		$T_c=25$	175	
$T_j$	Junction temperature		200	
$T_{stg}$	Storage temperature		-65~200	

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.0	$^{\circ}W$

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	2N6674	I <sub>C</sub> =0.2A ; I <sub>B</sub> =0	300			V
		2N6675		400			
V <sub>CEsat-1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =10A; I <sub>B</sub> =2A			1.0	V	
V <sub>CEsat-2</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =15A; I <sub>B</sub> =5A			5.0	V	
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =10A; I <sub>B</sub> =2A			1.5	V	
I <sub>CBO</sub>	Collector cut-off current	2N6674			0.1	mA	
		2N6675					V <sub>CB</sub> =650V; I <sub>E</sub> =0
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =7V; I <sub>C</sub> =0			1.0	mA	
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =3V	15		40		
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =10A ; V <sub>CE</sub> =2V	8		20		
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =0.5A ; V <sub>CE</sub> =10V;f=1MHz		15		MHz	

PACKAGE OUTLINE

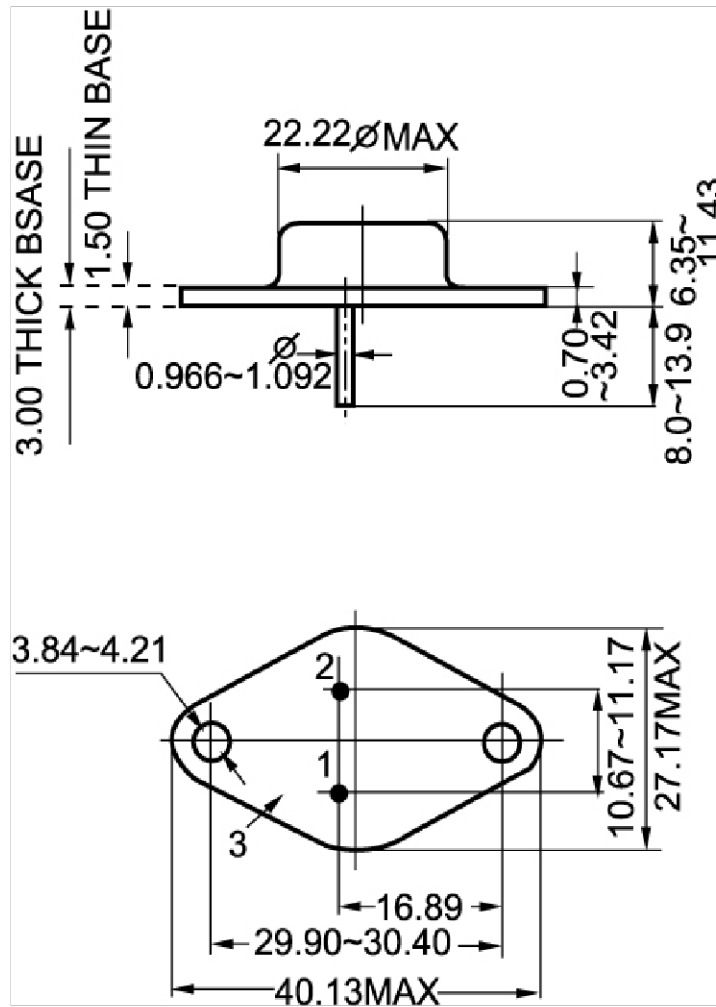


Fig.2 outline dimensions (unindicated tolerance:±0.10mm)