

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



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

Absolute maximum ratings($T_a = \square$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	450	V
			650	
V_{CEO}	Collector-emitter voltage	Open base	300	V
			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	$T_a = 25\square$	6	W
		$T_c = 25\square$	175	
T_j	Junction temperature		200	$\square$
T_{stg}	Storage temperature		-65~200	$\square$

THERMAL CHARACTERISTICS

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

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	2N6674	I _C =0.2A ; I _B =0	300			V
		2N6675		400			
V _{CEsat-1}	Collector-emitter saturation voltage		I _C =10A; I _B =2A			1.0	V
V _{CEsat-2}	Collector-emitter saturation voltage		I _C =15A; I _B =5A			5.0	V
V _{BEsat}	Base-emitter saturation voltage		I _C =10A; I _B =2A			1.5	V
I _{CBO}	Collector cut-off current	2N6674	V _{CB} =450V; I _E =0			0.1	mA
		2N6675	V _{CB} =650V; I _E =0				
I _{EBO}	Emitter cut-off current		V _{EB} =7V; I _C =0			1.0	mA
h _{FE-1}	DC current gain		I _C =1A ; V _{CE} =3V	15		40	
h _{FE-2}	DC current gain		I _C =10A ; V _{CE} =2V	8		20	
f _T	Transition frequency		I _C =0.5A ; V _{CE} =10V; f=1MHz		15		MHz

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PACKAGE OUTLINE

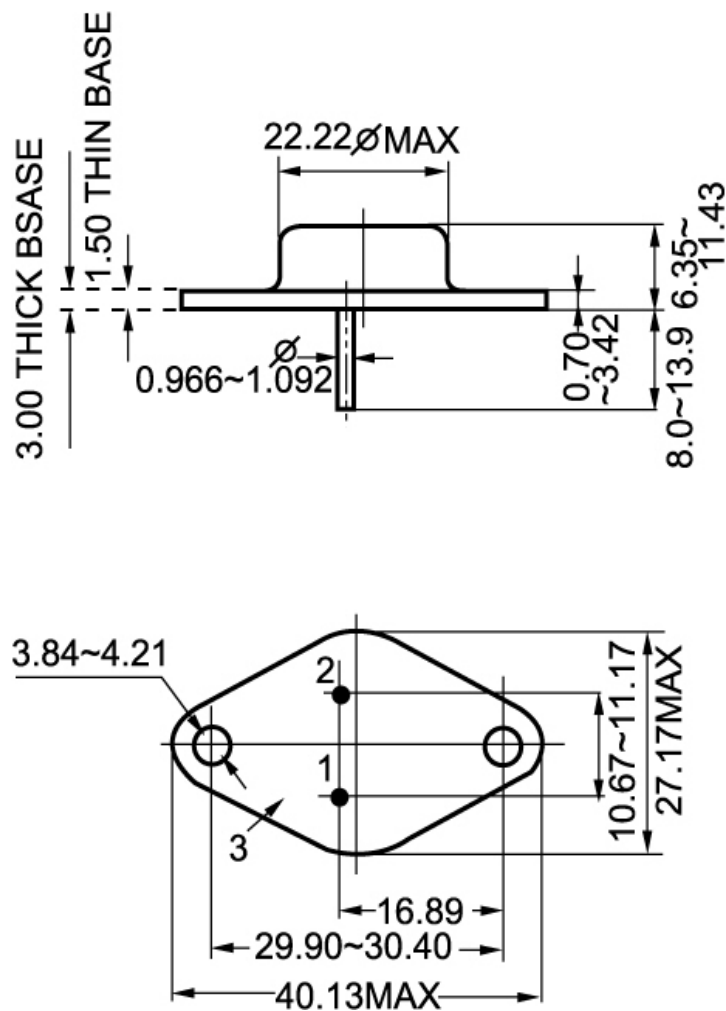


Fig.2 outline dimensions (unindicated tolerance:±0.10mm)