

Silicon NPN Power Transistors

2SC1576

DESCRIPTION

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

APPLICATIONS

- For high voltage ,fast switching applications

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



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

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	450	V
V_{CEO}	Collector-emitter voltage	Open base	330	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		8	A
P_T	Total power dissipation	$T_C \leq 25^\circ\text{C}$	100	W
T_j	Junction temperature		200	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance from junction to case	1.25	$^\circ\text{C}/\text{W}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =100mA ; I _B =0	330			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =5A; I _B =0.8A			1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =5A; I _B =0.8A			1.8	V
I _{CBO}	Collector cut-off current	V _{CB} =450V; I _E =0			0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			0.1	mA
h _{FE}	DC current gain	I _C =1A ; V _{CE} =5V	30		150	

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PACKAGE OUTLINE

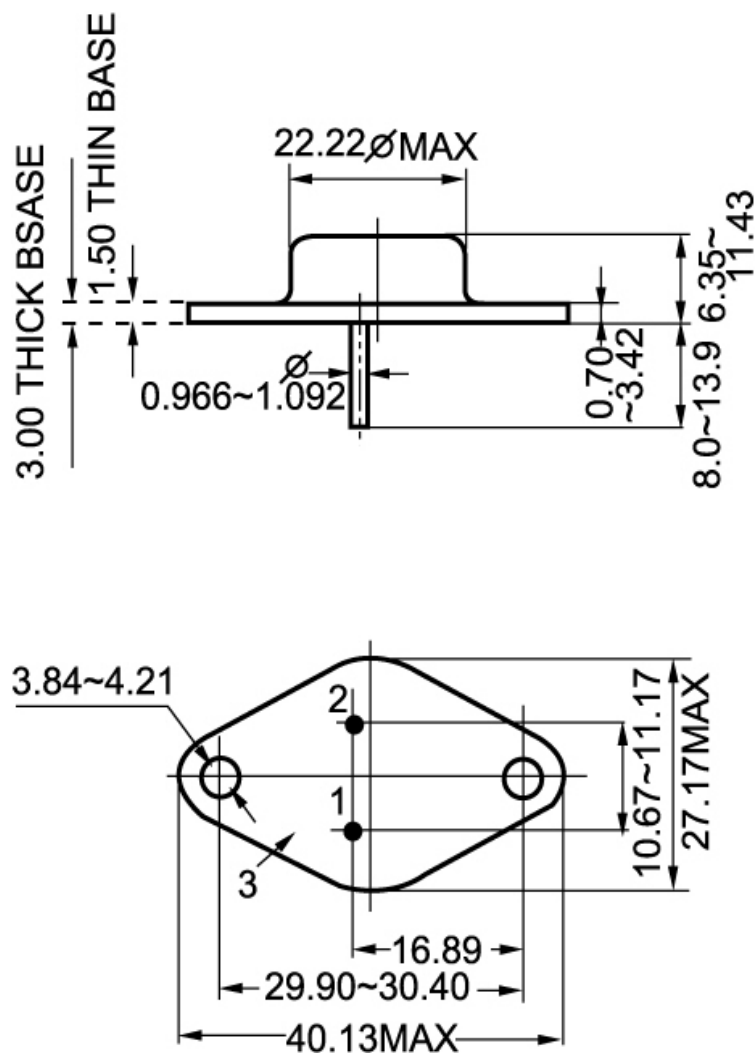


Fig.2 Outline dimensions