

Silicon NPN Power Transistors

2SC643

DESCRIPTION

- With TO-3 package
- High voltage,high reliability
- Low collector saturation voltage

APPLICATIONS

- For color TV horizontal output applications

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

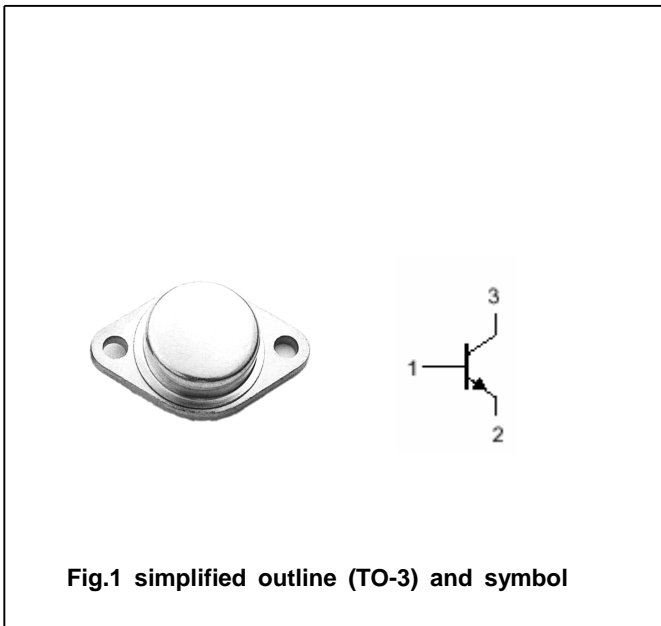


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=?)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1100	V
V_{CEO}	Collector-emitter voltage	Open base	600	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		2.5	A
P_C	Collector power dissipation	$T_C=25^\circ$	50	W
T_j	Junction temperature		150	?
T_{stg}	Storage temperature		-55~150	?

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CHARACTERISTICS

T_j=25° unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =100mA; I _B =0	600			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA; I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =2A; I _B =0.6A			5.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =2A; I _B =0.6A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =500V; I _E =0			10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			100	μA
h _{FE}	DC current gain	I _C =2A ; V _{CE} =15V	7			
f _T	Transition frequency	I _C =0.1A ; V _{CE} =10V		2		MHz

PACKAGE OUTLINE

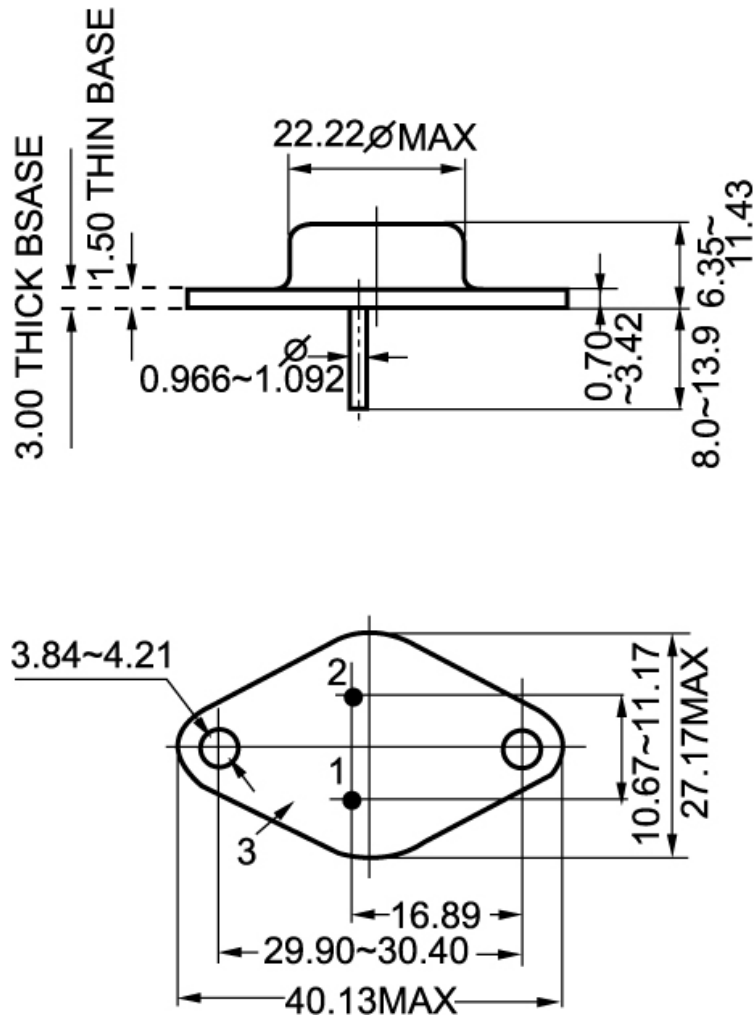


Fig.2 Outline dimensions