

Silicon NPN Power Transistors

2SC1004

DESCRIPTION

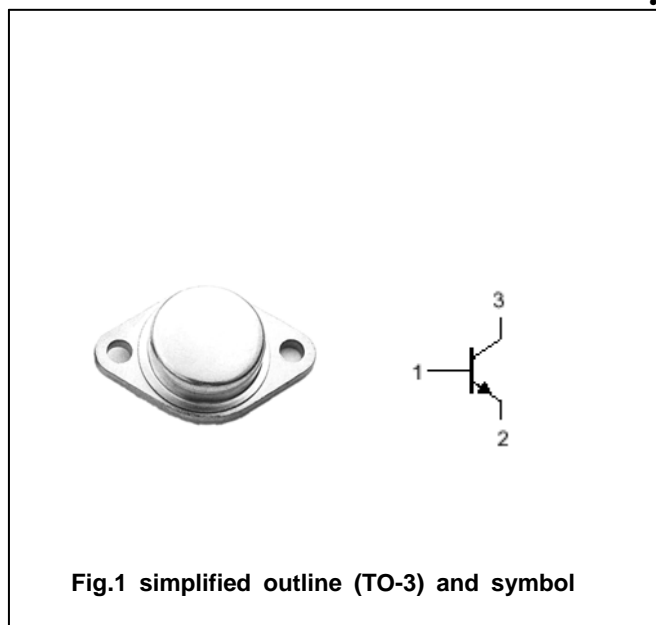
- With TO-3 package
- High breakdown voltage

APPLICATIONS

- For use in horizontal deflection output stages for color TV receives.

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1100	V
V_{CEO}	Collector-emitter voltage	Open base	700	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		0.5	A
P_T	Total power dissipation	$T_C = 25^\circ\text{C}$	50	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =0.1A; I _B =0	700			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA; I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =150mA; I _B =30mA			5.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =150mA; I _B =30mA			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =800V; I _E =0			10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =4V; I _C =0			10	μA
h _{FE}	DC current gain	I _C =150mA; V _{CE} =15V	30		160	
f _T	Transition frequency	I _C =150mA; V _{CE} =15V	2.0			MHz

PACKAGE OUTLINE

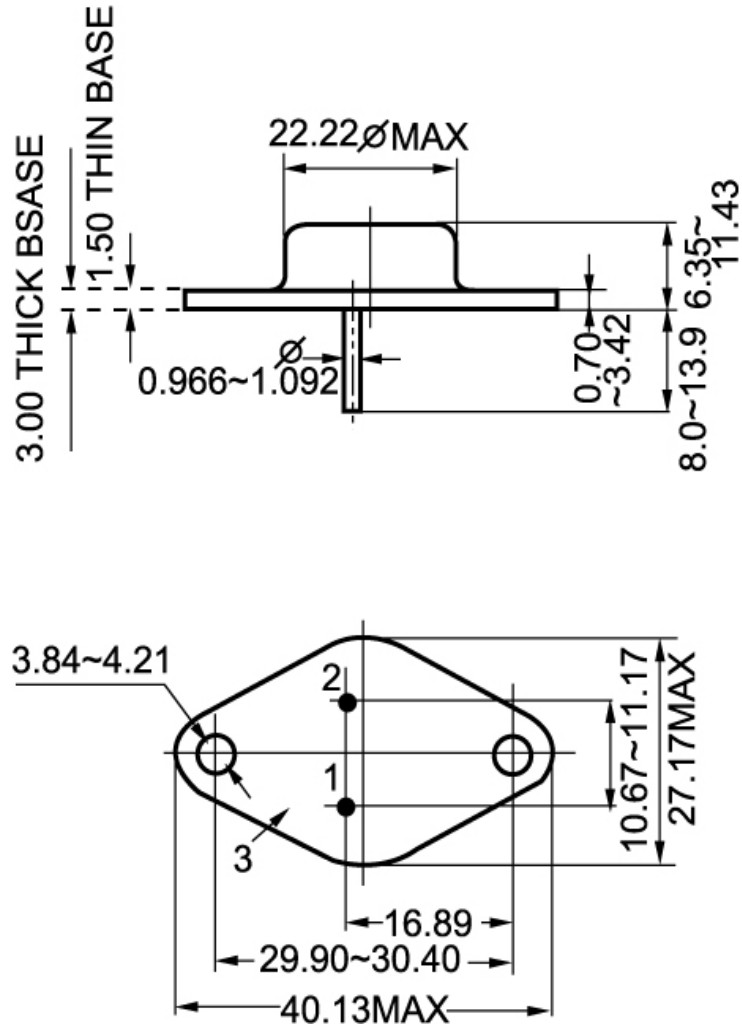


Fig.2 Outline dimensions