

Silicon NPN Power Transistors

3DD200

DESCRIPTION

- With TO-3 package
- High collector-base breakdown voltage
: $V_{CBO}=250V$

APPLICATIONS

- For TV horizontal output applications

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

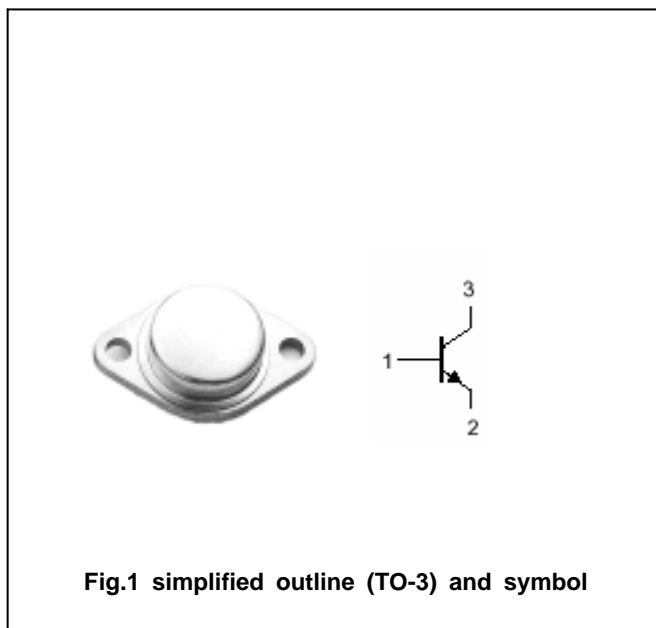


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings($T_a=$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	250	V
V_{CEO}	Collector-emitter voltage	Open base	100	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		3	A
P_C	Collector power dissipation	$T_C=75$	30	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

THERMAL CHARACTERISTICS

SYMBOL	CHARACTERISTICS	MAX	UNIT
R_{jc}	Thermal resistance junction to case	1.5	/W

Silicon NPN Power Transistors

3DD200

CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =50mA ; I _B =0	100			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA ; I _E =0	250			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	6			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =3A; I _B =0.3A			1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =3A; I _B =0.3A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =250V; I _E =0			0.5	mA
I _{EBO}	Emitter cut-off current	V _{EB} =6V; I _C =0			0.1	mA
h _{FE}	DC current gain	I _C =2A ; V _{CE} =5V	30		120	
t _f	Fall time	I _C =3A; I _{B1} =0.2A; I _{B2} =-0.3A			1	μs

PACKAGE OUTLINE

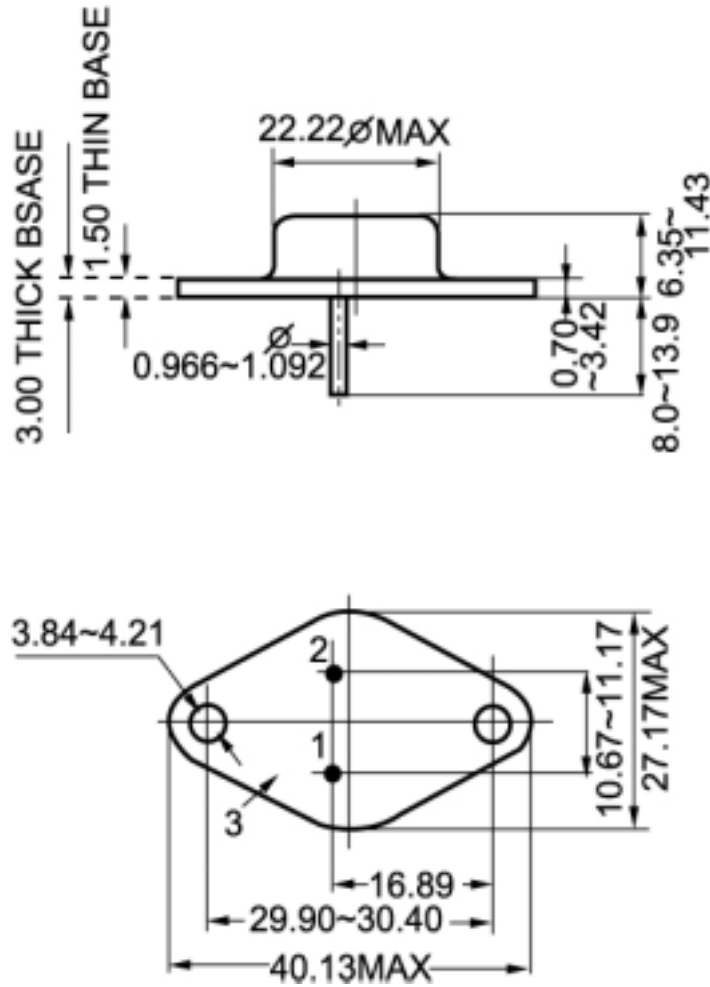


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.1\text{mm}$)