

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

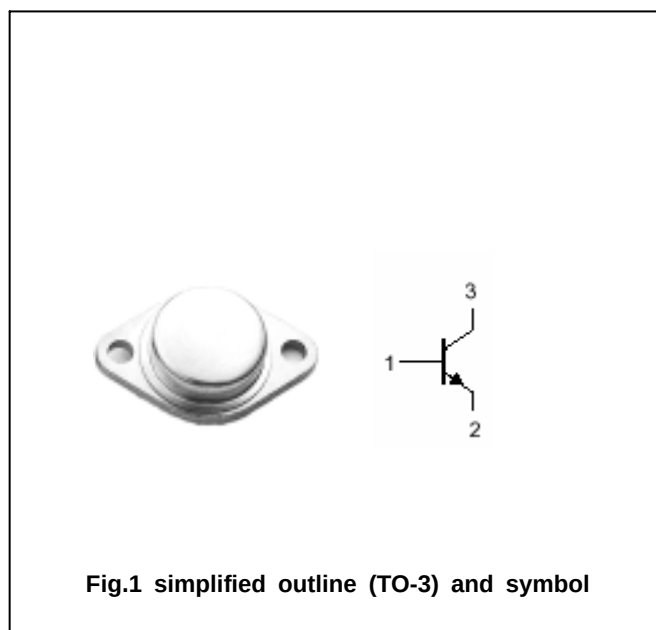


Fig.1 simplified outline (TO-3) and symbol

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

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	$T_C=75^{\circ}C$	30	W
T_j	Junction temperature		150	$^{\circ}C$
T_{stg}	Storage temperature		-55~150	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	CHARACTERISTICS	MAX	UNIT
$R_{\theta jc}$	Thermal resistance junction to case	1.5	$^{\circ}C/W$

Silicon NPN Power Transistors

3DD200

CHARACTERISTICS

Tj=25°C 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

Silicon NPN Power Transistors

3DD200

PACKAGE OUTLINE

