

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

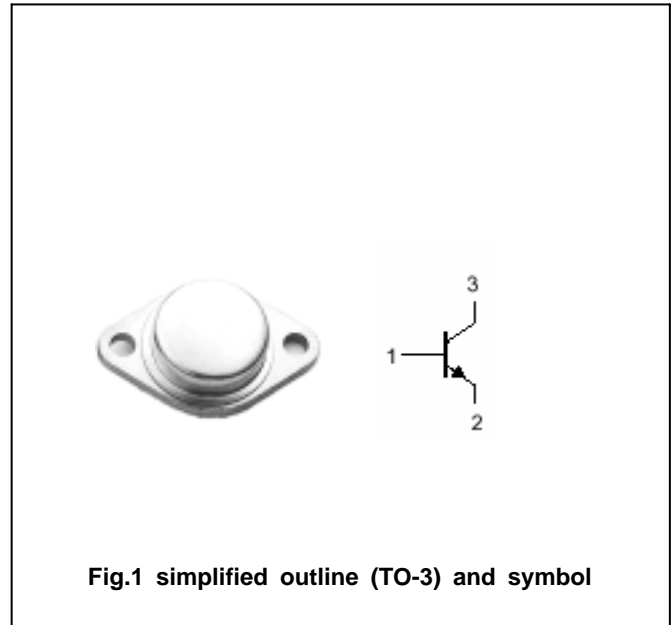


Fig.1 simplified outline (TO-3) and symbol

**Absolute maximum ratings(Ta= )**

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

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## 3DD200

## CHARACTERISTICS

T<sub>j</sub>=25 unless otherwise specified

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

PACKAGE OUTLINE

