

Silicon NPN Power Transistors

2SD2331

DESCRIPTION

- With TO-3PFa package
- High voltage;high speed
- Built-in damper diode

APPLICATIONS

- For color TV horizontal output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

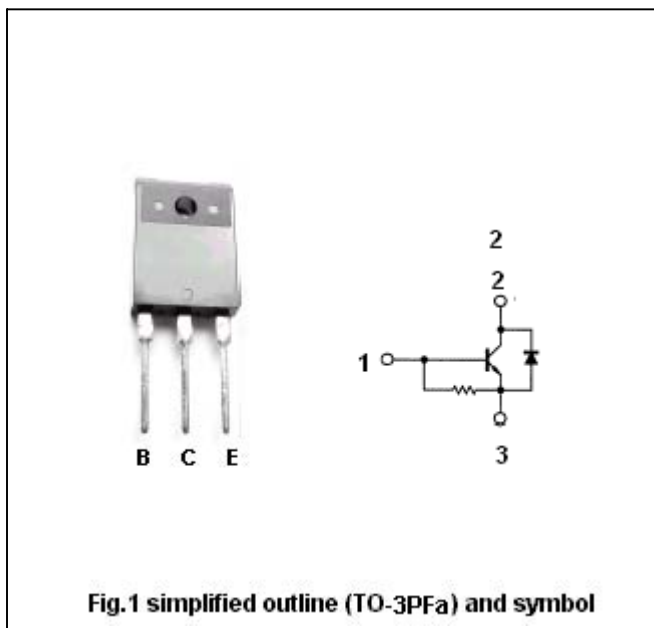


Fig.1 simplified outline (TO-3PFa) and symbol

Absolute maximum ratings(Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	1500	V
V _{CEO}	Collector-emitter voltage	Open base	600	V
V _{EBO}	Emitter-base voltage		5	V
I _C	Collector current		3.5	A
I _B	Base current		1	A
P _C	Collector power dissipation	T _C =25	40	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 _{(BR)EBO}	Emitter-base breakdown voltage	I _E =200mA , I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =3A; I _B =0.8A		3.0	5.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =3A ; I _B =0.8A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =800V I _E =0			10	μ A
h _{FE}	DC current gain	I _C =0.5A ; V _{CE} =5V	8			
f _T	Transition frequency	I _C =0.1A ; V _{CE} =10V		3		MHz
V _F	Diode forward voltage	I _F =3.5A			2.0	V

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PACKAGE OUTLINE

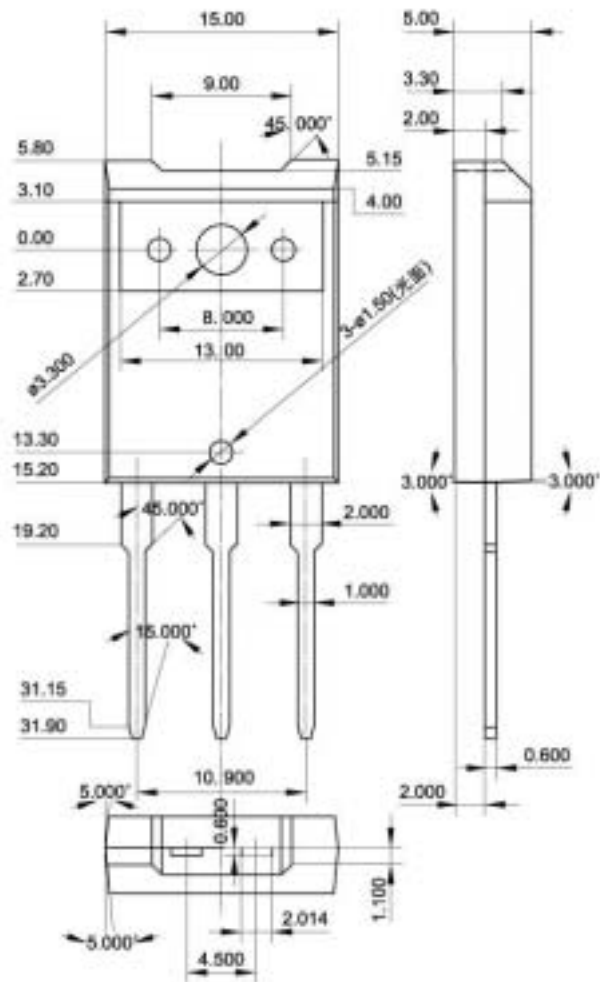


Fig.2 Outline dimensions (unindicated tolerance: $\pm 0.30\text{mm}$)