

Silicon NPN Power Transistors

2SD1541

DESCRIPTION

- With TO-3PFa package
- High voltage ,and high reliability
- Built-in damper diode
- High speed switching
- Wide area of safe operation

APPLICATIONS

- For horizontal deflection output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

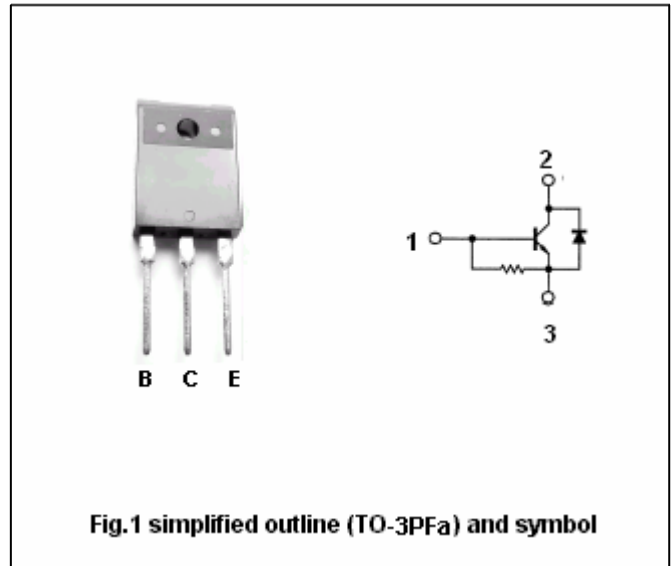


Fig.1 simplified outline (TO-3PFa) and symbol

Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1500	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		3	A
I_{CM}	Collector current-peak		10	A
I_{BM}	Base current		3.5	A
P_C	Collector power dissipation	$T_C=25^\circ C$	50	W
T_j	Junction temperature		130	°C
T_{stg}	Storage temperature		-55~130	°C

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =500mA ; I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =2A ; I _B =0.75A			5.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =2A ; I _B =0.75A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =750V; I _E =0			50	μ A
		V _{CB} =1500V; I _E =0			1	mA
h _{FE}	DC current gain	I _C =2A ; V _{CE} =10V	4		12	
V _F	Diode forward voltage	I _C =-4A			2.2	V

Switching times

t _{stg}	Storage time	I _C =2A I _{Bend} =0.75A; L _{Leak} =5 μ H	3.0		7.0	μ s
t _f	Fall time				0.75	μ s

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PACKAGE OUTLINE

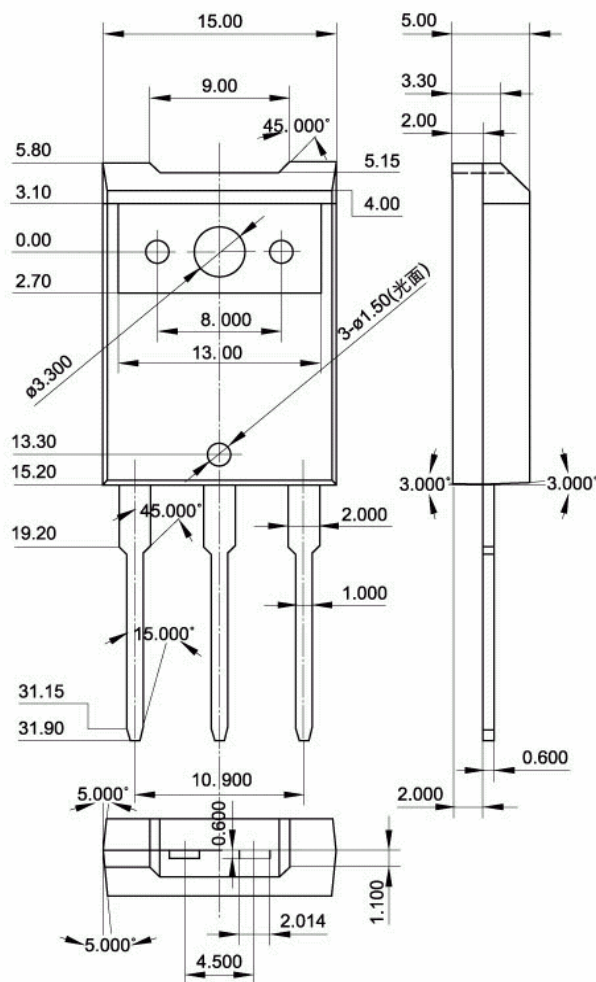


Fig.2 Outline dimensions (unindicated tolerance: ±0.30mm)