

Silicon NPN Power Transistors

2SD1849

DESCRIPTION

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

APPLICATIONS

- Horizontal deflection output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

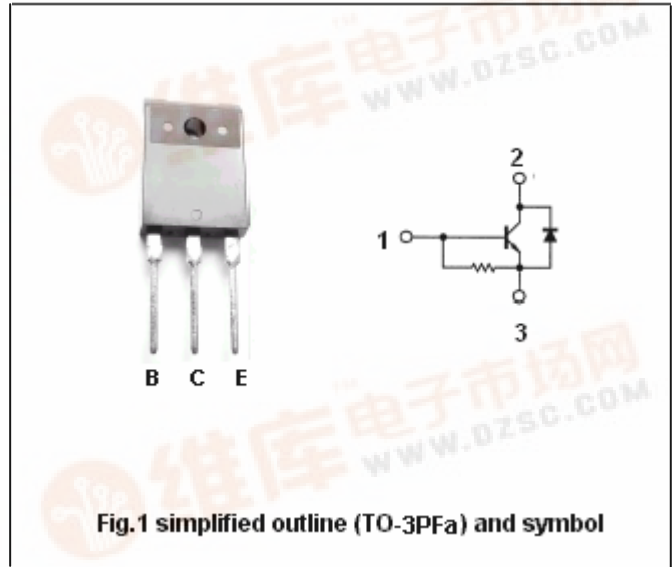


Fig.1 simplified outline (TO-3PFa) and symbol

Absolute maximum ratings(Ta=25 )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	1500	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	700	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	7	V
I <sub>C</sub>	Collector current		7	A
P <sub>C</sub>	Collector power dissipation	T <sub>a</sub> =25	3	W
		T <sub>C</sub> =25	120	
T <sub>j</sub>	Max.operating junction temperature		150	
T <sub>stg</sub>	Storage temperature		-55~150	

## Silicon NPN Power Transistors

## 2SD1849

## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =500mA ; I <sub>C</sub> =0	7			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =6A ; I <sub>B</sub> =1.4A			8.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =6A ; I <sub>B</sub> =1.4A			1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =750V ; I <sub>E</sub> =0			10	μA
		V <sub>CB</sub> =1500V ; I <sub>E</sub> =0			1.0	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =5V	5		25	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =6A ; V <sub>CE</sub> =10V	4			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =1A ; V <sub>CE</sub> =10V ; f=0.5MHz		2		MHz
V <sub>F</sub>	Diode forward voltage	I <sub>C</sub> =7A			2.0	V

Silicon NPN Power Transistors

2SD1849

PACKAGE OUTLINE

