

# 2SD1297

Silicon NPN Transistors



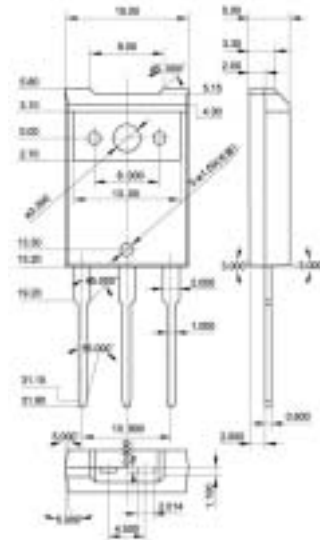
B C E

## ◆ Features

- Darlington
- With TO-3PFa package
- Low speed power switching applications

## ◆ Absolute Maximum Ratings Tc=25

SYMBOL	PARAMETER	RATING	UNIT
V <sub>CBO</sub>	Collector to base voltage	150	V
V <sub>CEO</sub>	Collector to emitter voltage	100	V
V <sub>EBO</sub>	Emitter to base voltage	5	V
I <sub>C</sub>	Collector current-Continuous	25	A
P <sub>D</sub>	Total Power Dissipation@TC=25	100	W
T <sub>j</sub>	Junction temperature	150	
T <sub>stg</sub>	Storage temperature	-55~150	



TO-3PFa

## ◆ Electrical Characteristics Tc=25

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> =100mA; I <sub>B</sub> =0	100		V
V <sub>CBO</sub>	Collector-Base Voltage				
I <sub>CEO</sub>	Collector Cutoff Current				
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> =100V; I <sub>E</sub> =0		10	uA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> =5V; I <sub>C</sub> =0		5	mA
V <sub>EBO</sub>	Emitter-Base Voltage				
V <sub>CE(sat-1)</sub>	Collector-emitter saturation voltages	I <sub>C</sub> =15A; I <sub>B</sub> =0.03A		1.5	V
V <sub>CE(sat-2)</sub>	Collector-emitter saturation voltages				
h <sub>FE-1</sub>	Forward current transfer ratio	I <sub>C</sub> =15A; V <sub>CE</sub> =2V	1000	30000	
h <sub>FE-2</sub>	Forward current transfer ratio				
V <sub>BE(sat)1</sub>	Base-emitter saturation voltages	I <sub>C</sub> =15A; I <sub>B</sub> =0.03A		2.2	V
V <sub>BE(sat)2</sub>	Base-emitter saturation voltages				
f <sub>T</sub>	Transition frequency				