

Silicon PNP Power Transistors

2N6298 2N6299

DESCRIPTION

- With TO-66 package
- DARLINGTON
- Low collector saturation voltage
- Complement to type 2N6300/6301

APPLICATIONS

- General purpose power amplifier and low frequency switching applications

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

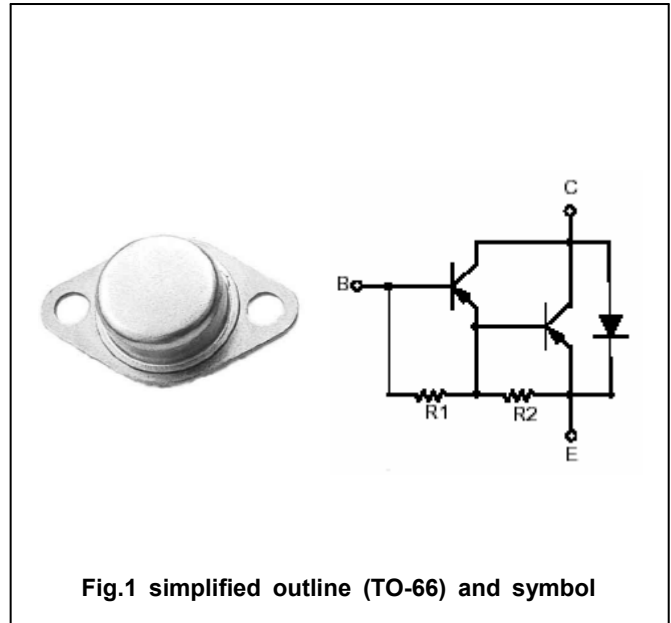


Fig.1 simplified outline (TO-66) and symbol

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2N6298	-60	V
		2N6299	-80	
V_{CEO}	Collector-emitter voltage	2N6298	-60	V
		2N6299	-80	
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-8	A
I_{CM}	Collector current-peak		-16	A
I_B	Base current		-0.12	A
P_T	Total power dissipation	$T_C=25^\circ\text{C}$	75	W
T_j	Junction temperature		200	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal resistance from junction to case	2.33	$^\circ\text{C}/\text{W}$

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	2N6298	I _C =-0.1A ; I _B =0			V
		2N6299				
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =-4A; I _B =-16mA			-2.0	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =-8A; I _B =-80mA			-3.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-8A; I _B =-80mA			-4.0	V
V _{BE}	Base -emitter on voltage	I _C =-4A ; V _{CE} =-3V			-2.8	V
I _{CEx}	Collector cut-off current	2N6298	V _{CE} =-60V; V _{BE(off)} =-1.5V T _C =150 °C			mA
		2N6299				
I _{CEO}	Collector cut-off current	2N6298	V _{CE} =-30V; I _B =0			mA
		2N6299				
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-2.0	mA
h _{FE-1}	DC current gain	I _C =-4A ; V _{CE} =-3V	750		18000	
h _{FE-2}	DC current gain	I _C =-8A ; V _{CE} =-3V	100			
C _{OB}	Output capacitance	I _E =0 ; V _{CB} =-10V;f=0.1MHz			300	pF

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PACKAGE OUTLINE



Fig.2 Outline dimensions