

Inchange Semiconductor

Product Specification

Silicon PNP Power Transistors

2N6298 2N6299

DESCRIPTION

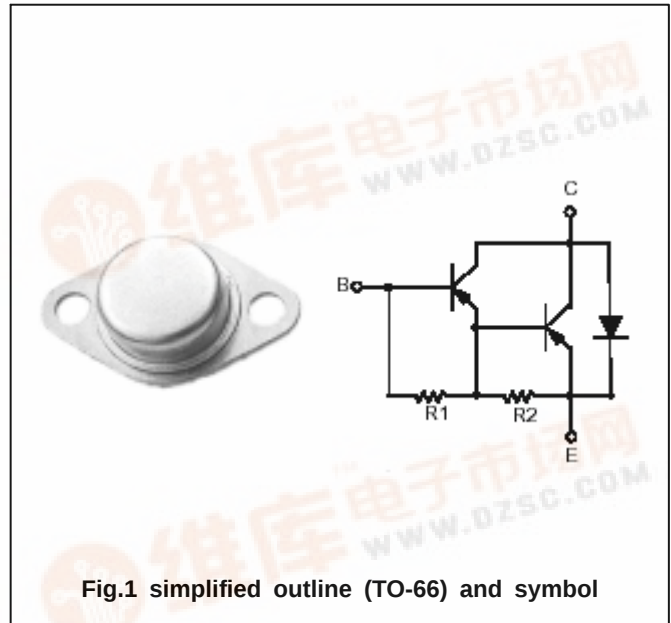
- With TO-66 package
- DARLINGTON
- Low collector saturation voltage
- Complement to type 2N6300/6301

APPLICATIONS

- General purpose power amplifier and low frequency switching applications

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2N6298 Open emitter	-60	V
		2N6299	-80	
V_{CEO}	Collector-emitter voltage	2N6298 Open base	-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	$T_C=25$	75	W
T_j	Junction temperature		200	
T_{stg}	Storage temperature		-65~200	

THERMAL CHARACTERISTICS

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

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	2N6298	I _C =-0.1A ; I _B =0	-60			V
		2N6299		-80			
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			-0.5 -5.0	mA
		2N6299	V _{CE} =-80V; V _{BE(off)} =-1.5V T _C =150			-0.5 -5.0	
I _{CEO}	Collector cut-off current	2N6298	V _{CE} =-30V; I _B =0			-0.5	mA
		2N6299	V _{CE} =-40V; I _B =0				
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

