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

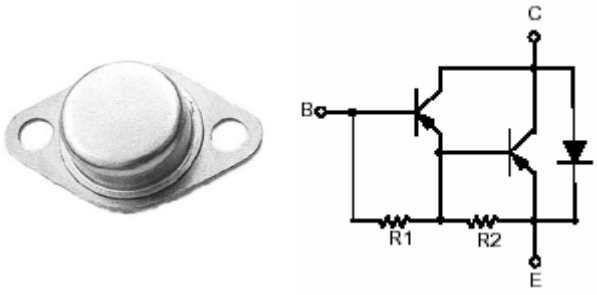

Fig.1 simplified outline (TO-66) and symbol

Absolute maximum ratings(Ta=25□)

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
$R_{th\ j\text{-}C}$	Thermal resistance from junction to case	2.33	□/W

CHARACTERISTICS

Tj=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

PACKAGE OUTLINE

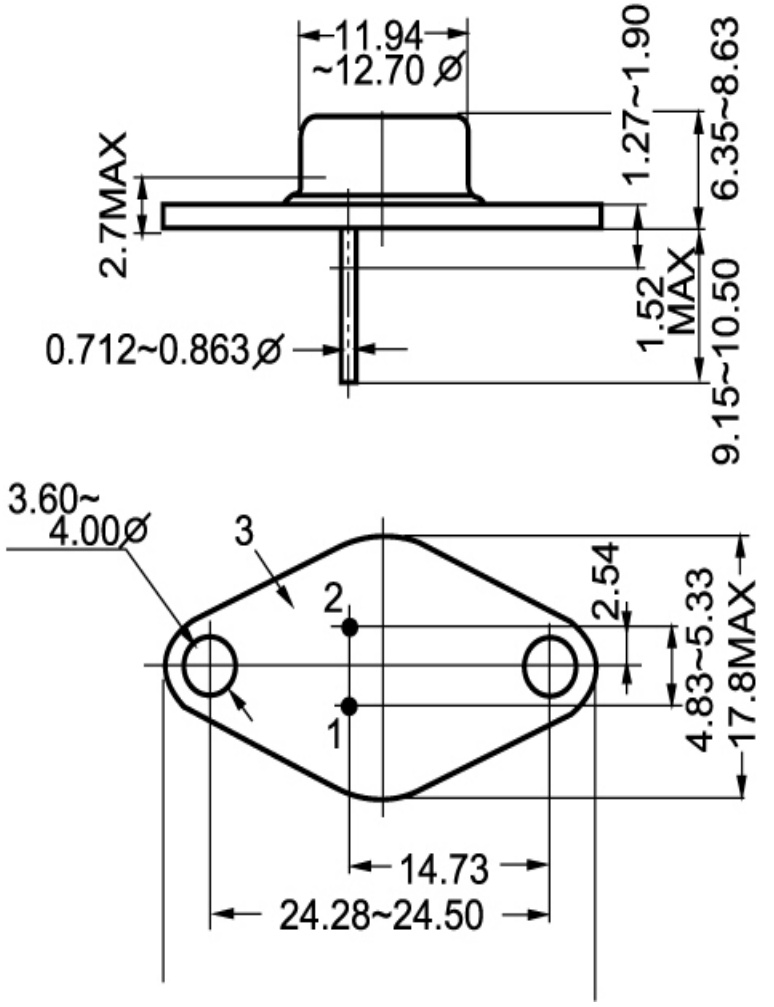

Fig.2 Outline dimensions