Silicon PNP Power Transistors 2N4898 2N4899 2N4900

DESCRIPTION

·With TO-66 package
·Low collector saturation voltage
·Excellent safe operating area
·2N4900 complement to type 2N4912

APPLICATIONS

·Designed for driver circuits,switching and amplifier applications

PINNING

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	2N4898	Open emitter	-40	V
		2N4899		-60	
		2N4900		-80	
V_{CEO}	Collector-emitter voltage	2N4898	Open base	-40	V
		2N4899		-60	
		2N4900		-80	
V_{EBO}	Emitter-base voltage		Open collector	-5	V
I_C	Collector current			-1.0	A
I_{CM}	Collector current-peak			-4.0	A
I_B	Base current			-1.0	A
P_D	Total Power Dissipation		T_C=25□	25	W
T_j	Junction temperature			150	□
T_{stg}	Storage temperature			-65~200	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{(th)\,jc}$	Thermal resistance junction to case	7.0	□/W

CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	2N4898	I_C=-0.1A ;I_B=0	-40			V
		2N4899		-60			
		2N4900		-80			
$V_{CE(sat)}$	Collector-emitter saturation voltage		I_C=-1A; I_B=-0.1A			-0.6	V
$V_{BE(sat)}$	Base-emitter saturation voltage		I_C=-1A ;I_B=-0.1A			-1.3	V
$V_{BE(on)}$	Base-emitter on voltage		I_C=-1A ; V_{CE}=-1V			-1.3	V
I_{CEO}	Collector cut-off current	2N4898	V_{CE}=-20V; I_B=0			-0.5	mA
		2N4899	V_{CE}=-30V; I_B=0				
		2N4900	V_{CE}=-40V; I_B=0				
I_{CEX}	Collector cut-off current		V_{CE}=Rated V_{CEO}; $V_{BE(off)}$=1.5V T_C=150□			-0.1 -1.0	mA
I_{CBO}	Collector cut-off current		V_{CB}=Rated V_{CBO}; I_E=0			-0.1	mA
I_{EBO}	Emitter cut-off current		V_{EB}=-5V; I_C=0			-1.0	mA
h_{FE-1}	DC current gain		I_C=-50mA ; V_{CE}=-1V	40			
h_{FE-2}	DC current gain		I_C=-500mA ; V_{CE}=-1V	20		100	
h_{FE-3}	DC current gain		I_C=-1.0A ; V_{CE}=-1V	10			
C_{OB}	Output capacitance		I_E=0;V_{CB}=-10V;f=1MHz			100	pF
f_T	Transition frequency		I_C=-250mA;V_{CE}=-10V	3.0			MHz

PACKAGE OUTLINE

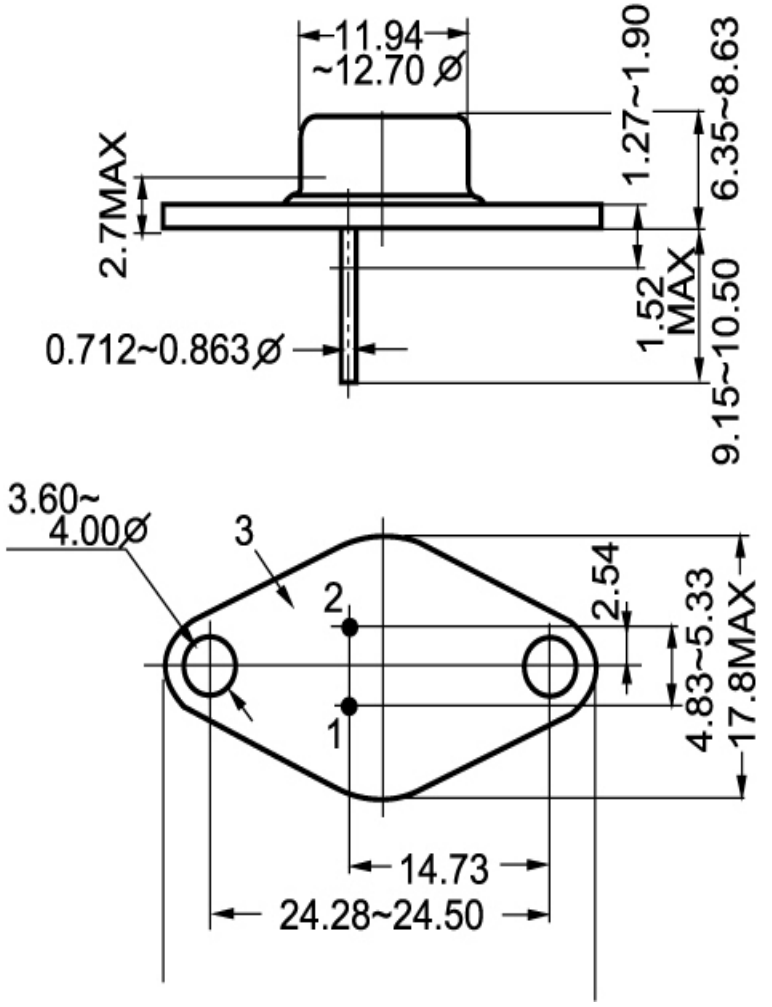

Fig.2 outline dimensions