

Silicon NPN Power Transistors

2N5598 2N5600 2N5602 2N5604

DESCRIPTION

- With TO-66 package
- Excellent safe operating area
- Low collector saturation voltage

APPLICATIONS

- For high frequency power amplifier ; audio power amplifier and drivers.

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



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

Absolute maximum ratings($T_a = \square$)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2N5598	Open emitter	80	V
		2N5600/5602		100	
		2N5604		120	
V_{CEO}	Collector-emitter voltage	2N5598	Open base	60	V
		2N5600/5602		80	
		2N5604		100	
V_{EBO}	Emitter-base voltage		Open collector	5	V
I_C	Collector current			2	A
P_D	Total power dissipation		$T_C = 25\square$	20	W
T_j	Junction temperature			150	$\square$
T_{stg}	Storage temperature			-65~150	$\square$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	4.37	$\square/W$

Silicon NPN Power Transistors

2N5598 2N5600 2N5602 2N5604

CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(SUS)}$	Collector-emitter sustaining voltage	2N5598	$I_C=50mA; I_B=0$	60			V
		2N5600/5602		80			
		2N5604		100			
V_{CEsat}	Collector-emitter saturation voltage		$I_C=1A; I_B=0.1A$			1.0	V
V_{BE}	Base-emitter on voltage		$I_C=1A; V_{CE}=5V$			1.5	V
I_{CBO}	Collector cut-off current		$V_{CB}=\text{Rated } V_{CBO}; I_E=0$			0.1	mA
I_{CEO}	Collector cut-off current		$V_{CE}=\text{Rated } V_{CEO}; I_B=0$			1.0	mA
I_{EBO}	Emitter cut-off current		$V_{EB}=5V; I_C=0$			0.1	mA
h_{FE}	DC current gain	2N5598/5602	$I_C=1A; V_{CE}=5V$	70		200	
		2N5600/5604		30		90	
f_T	Transition frequency	2N5598/5602	$I_C=0.5A; V_{CE}=10V$	60			MHz
		2N5600/5604		50			

Silicon NPN Power Transistors

2N5598 2N5600 2N5602 2N5604

PACKAGE OUTLINE

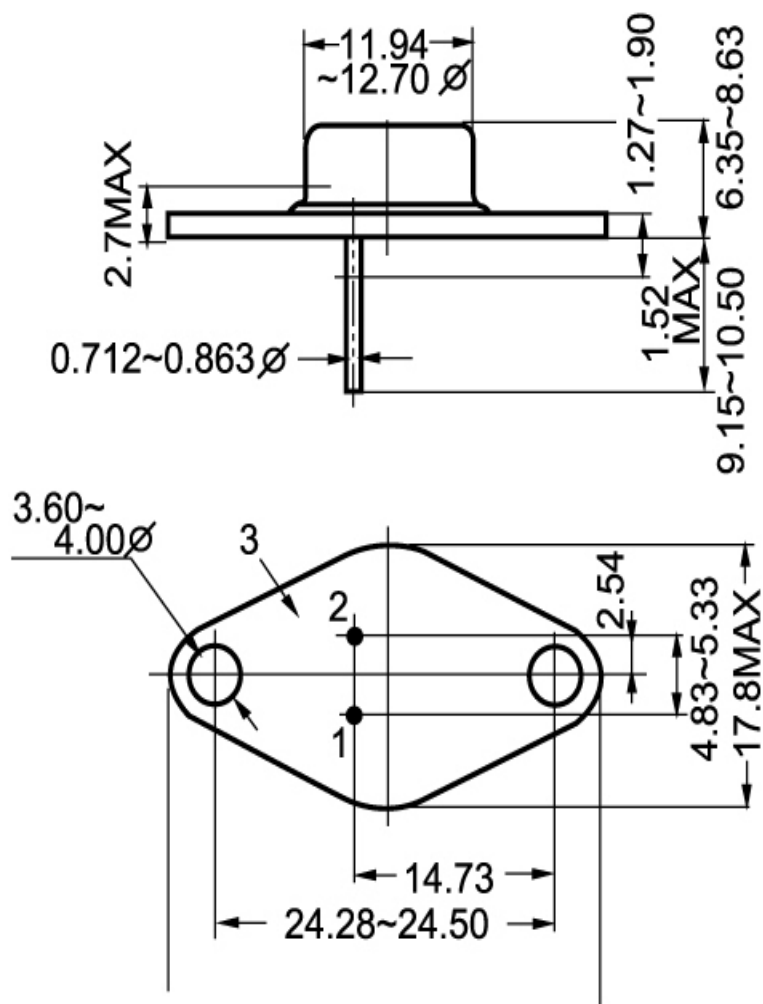


Fig.2 outline dimensions