

Silicon PNP Power Transistors**2N5613 2N5615 2N5617 2N5619****DESCRIPTION**

- With TO-3 package
- Excellent safe operating area
- Low collector saturation voltage

APPLICATIONS

- For general-purpose amplifier ;
and switching applications

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

**Fig.1 simplified outline (TO-3) and symbol****Absolute maximum ratings(Ta=□)**

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2N5613	Open emitter	-80	V
		2N5615/5617		-100	
		2N5619		-120	
V _{CEO}	Collector-emitter voltage	2N5613	Open base	-60	V
		2N5615/5617		-80	
		2N5619		-100	
V _{EBO}	Emitter-base voltage		Open collector	-5	V
I _C	Collector current			-5	A
P _D	Total power dissipation		T _C =25□	50	W
T _j	Junction temperature			150	□
T _{stg}	Storage temperature			-65~150	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R _{th j-c}	Thermal resistance junction to case	1.5	□/W

Silicon PNP Power Transistors**2N5613 2N5615 2N5617 2N5619****CHARACTERISTICS****T_j=25°C unless otherwise specified**

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-emitter sustaining voltage	2N5613	$I_C = -50mA ; I_B = 0$	-60			V
		2N5615/5617		-80			
		2N5619		-100			
V_{CEsat}	Collector-emitter saturation voltage		$I_C = -1A ; I_B = -0.1A$			-0.5	V
V_{BE}	Base-emitter on voltage		$I_C = -2.5A ; V_{CE} = -5V$			-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	2N5613/5617	$I_C = -2.5A ; V_{CE} = -5V$	70		200	
		2N5615/5619		30		90	
f_T	Transition frequency	2N5613/5617	$I_C = -0.5A ; V_{CE} = -10V$	70			MHz
		2N5615/5619		60			

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PACKAGE OUTLINE

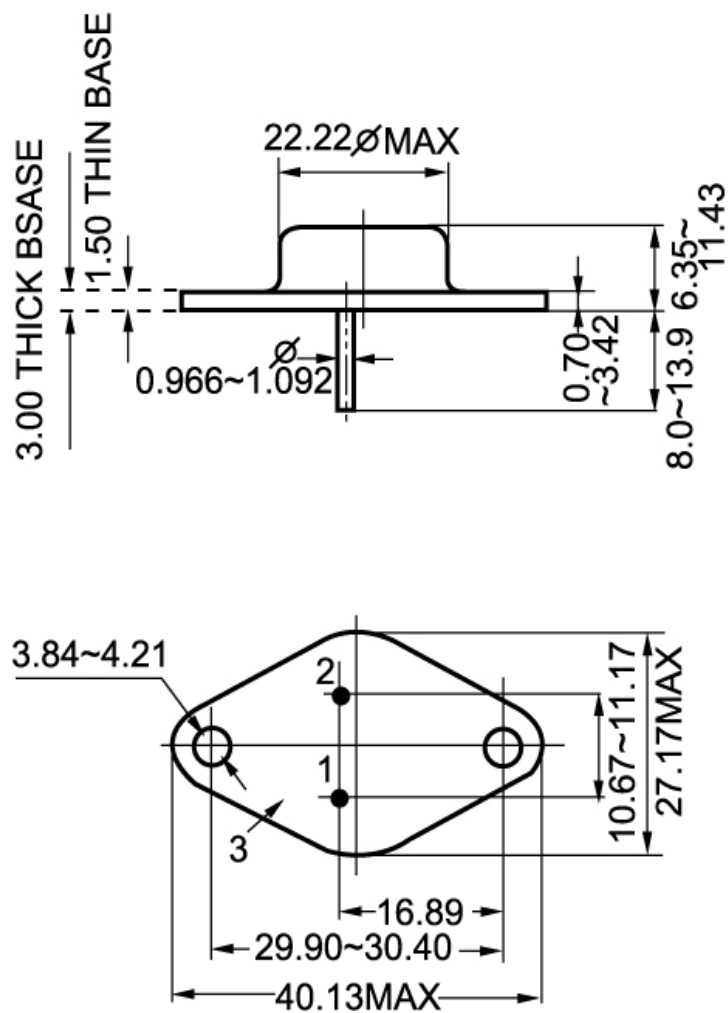


Fig.2 outline dimensions