

Silicon PNP Power Transistors

2SA837

DESCRIPTION

- With TO-3 package
- Wide area of safe operation
- Complement to type 2SC1667

APPLICATIONS

- For radio frequency and power amplifier applications

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

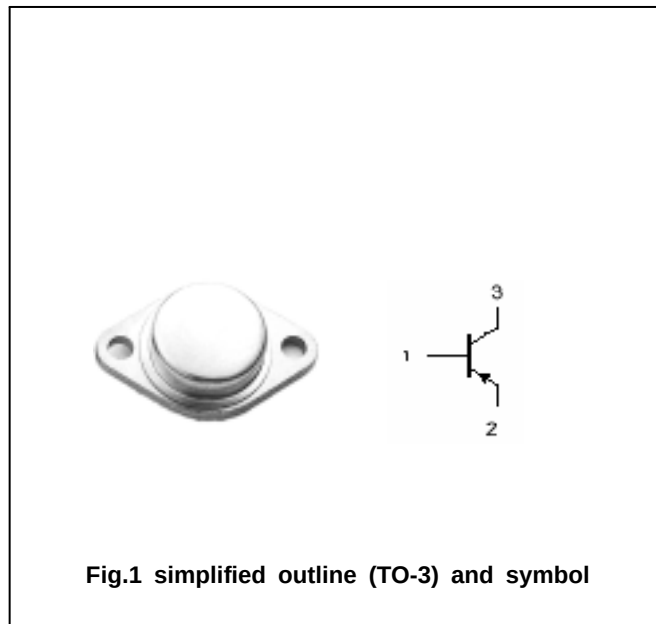


Fig.1 simplified outline (TO-3) and symbol

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-90	V
V_{CEO}	Collector-emitter voltage	Open base	-90	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-4	A
P_C	Collector power dissipation	$T_C = 75^\circ\text{C}$	50	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

Silicon PNP Power Transistors

2SA837

CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-25mA; I _B =0	-90			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-1mA; I _E =0	-90			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-1mA; I _C =0	-5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-3A; I _B =-0.3A			-1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =-90V; I _E =0			-0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-0.1	mA
h _{FE}	DC current gain	I _C =-1A; V _{CE} =-4V	40		200	
C _{OB}	Collector output capacitance	I _E =0; V _{CB} =-10V; f=1MHz		200		pF
f _T	Transition frequency	I _C =-1A; V _{CE} =-10V		10		MHz

Silicon PNP Power Transistors

2SA837

PACKAGE OUTLINE

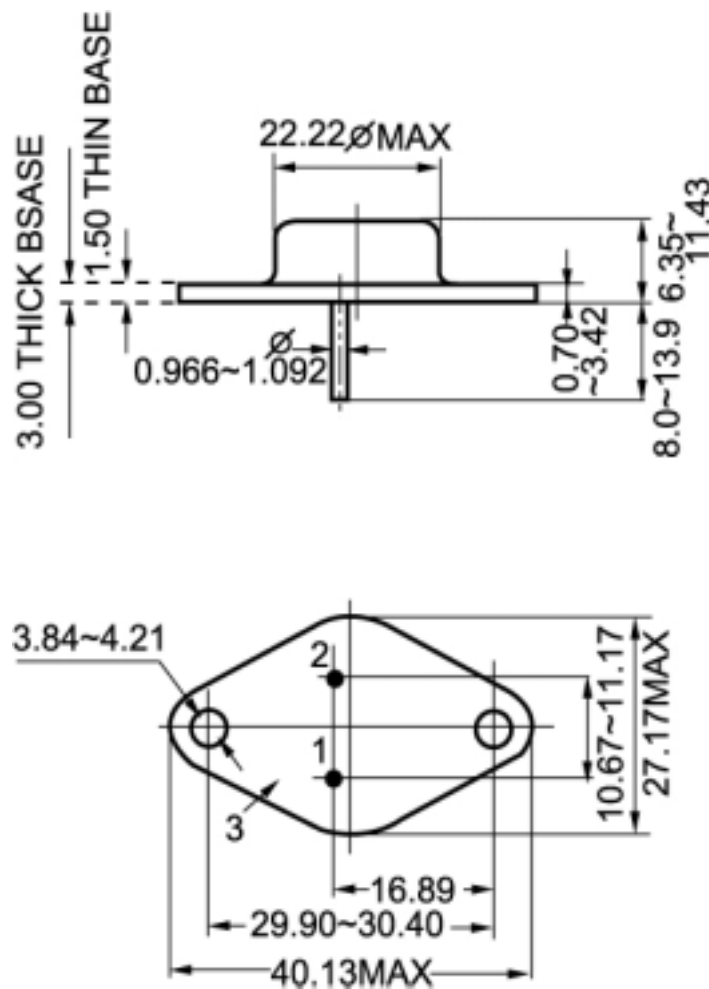


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.1\text{mm}$)