

Silicon NPN Power Transistors

2SC4687

DESCRIPTION

- With TO-3PN package
- High breakdown voltage
- Fast switching speed
- Wide area of safe operation

APPLICATIONS

- For switching regulator applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

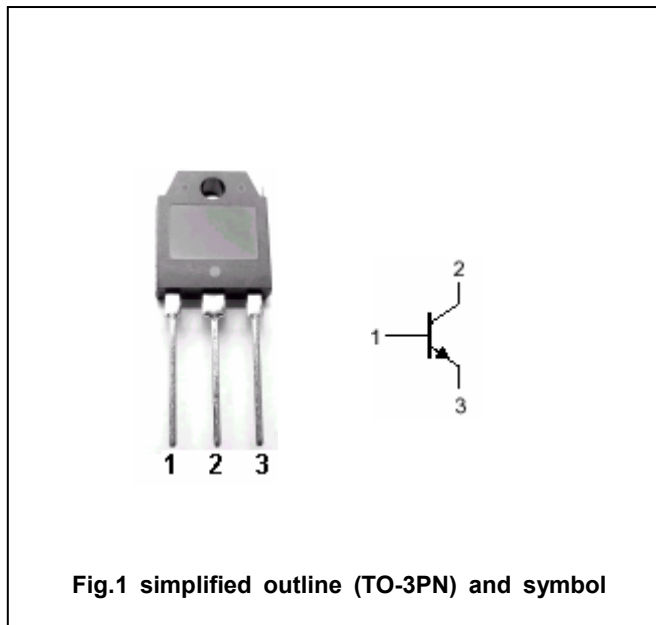


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	500	V
V _{CEO}	Collector-emitter voltage	Open base	400	V
V _{EBO}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		7	A
I _{CM}	Collector current-peak		14	A
I _B	Base current		3	A
P _C	Collector power dissipation	T _a =25°C	2.5	W
		T _C =25°C	60	
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =5mA ; I _B =0	400			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA ; I _E =0	500			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =3A ; I _B =0.6A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =3A ; I _B =0.6A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =500V ; I _E =0			100	μA
I _{EBO}	Emitter cut-off current	V _{EB} =7V ; I _C =0			100	μA
h _{FE-1}	DC current gain	I _C =0.1A ; V _{CE} =5V	15			
h _{FE-2}	DC current gain	I _C =3A ; V _{CE} =5V	8			
f _T	Transition frequency	I _C =0.5A ; V _{CE} =10V		30		MHz

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PACKAGE OUTLINE

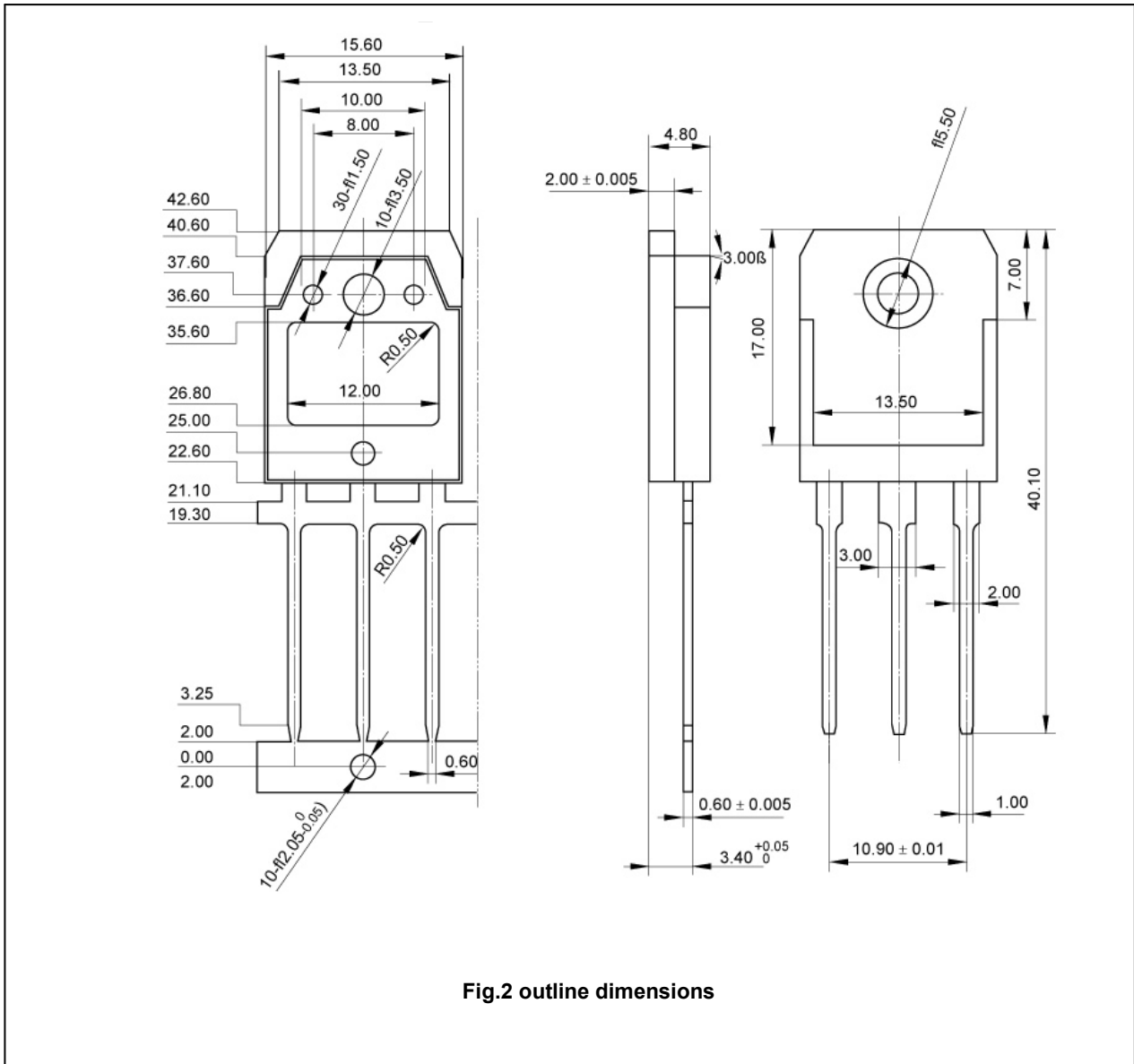


Fig.2 outline dimensions