

Silicon NPN Power Transistors

2SC2305

DESCRIPTION

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

APPLICATIONS

- For switching regulator applications

PINNING

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

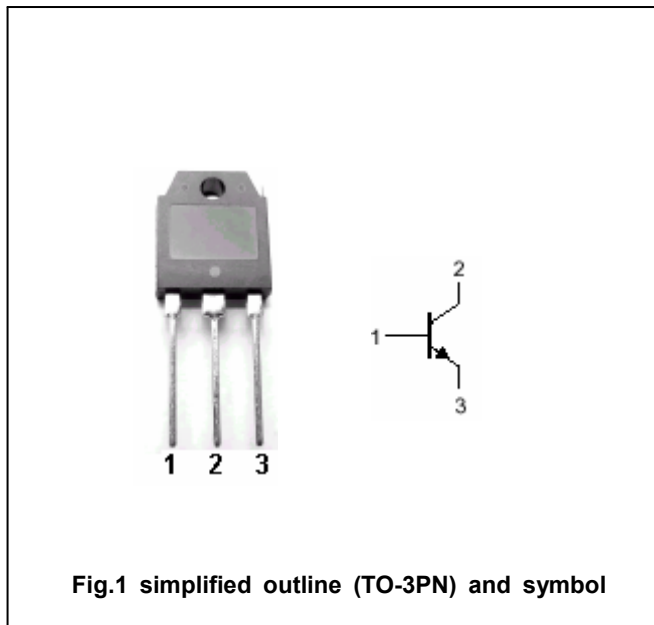


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	400	V
V _{CEO}	Collector-emitter voltage	Open base	400	V
V _{EBO}	Emitter-base voltage	Open collector	8	V
I _C	Collector current (DC)		7	A
I _{CM}	Collector current-peak		14	A
I _B	Base current (DC)		3	A
P _C	Collector power dissipation	T _C =25°C	80	W
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 =10mA ; R _{BE} =∞	400			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1m A; I _E =0	400			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1m A; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =4A; I _B =0.8A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =4A; I _B =0.8A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =400V; I _E =0			10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			10	μA
h _{FE-1}	DC current gain	I _C =0.8A ; V _{CE} =5V	15		50	
h _{FE-2}	DC current gain	I _C =4A ; V _{CE} =5V	10			

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PACKAGE OUTLINE

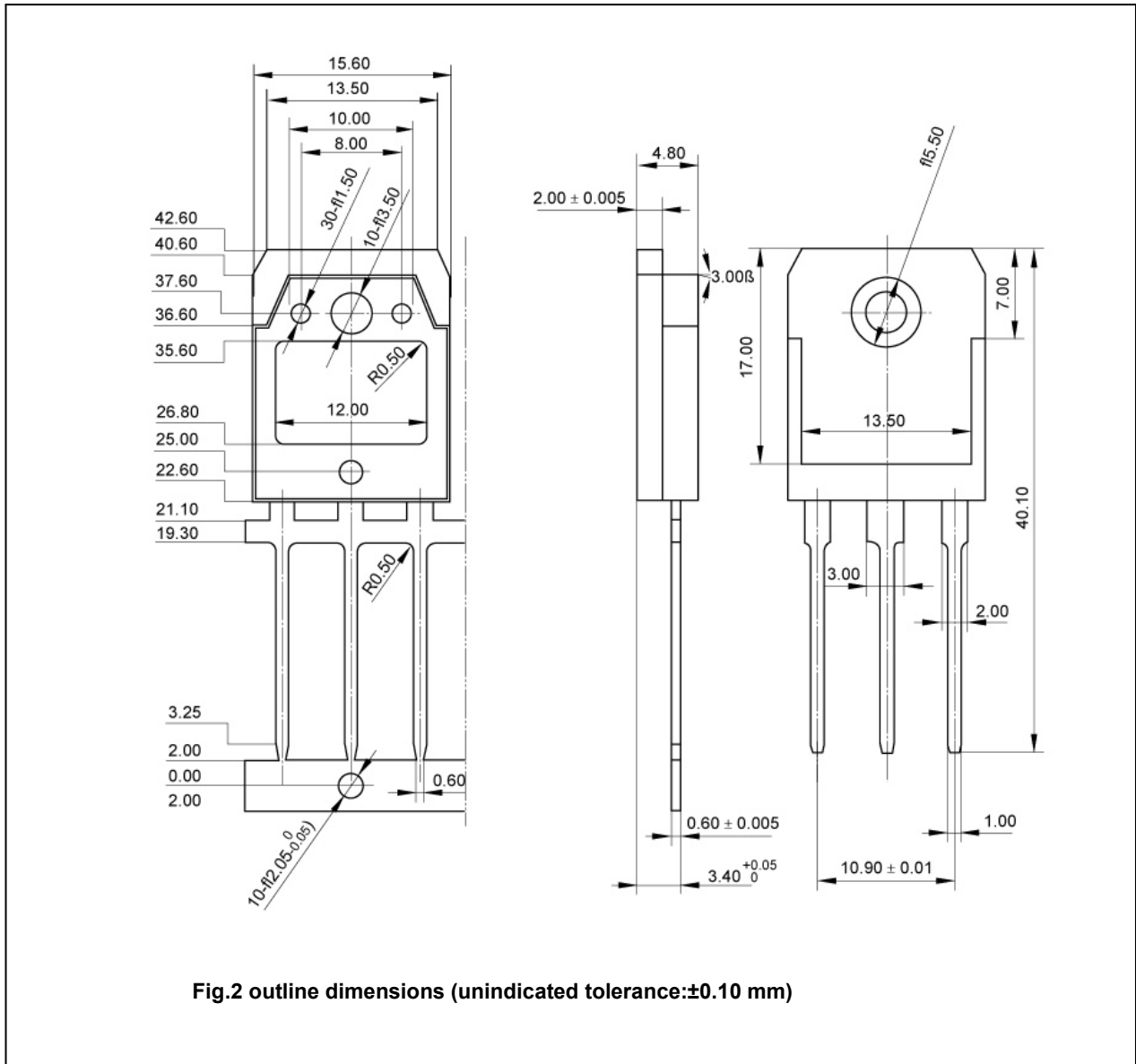


Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)