

Inchange Semiconductor

Product Specification

Silicon NPN Power Transistors

2SC2809

DESCRIPTION

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

APPLICATIONS

- For power amplifier applications

PINNING

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

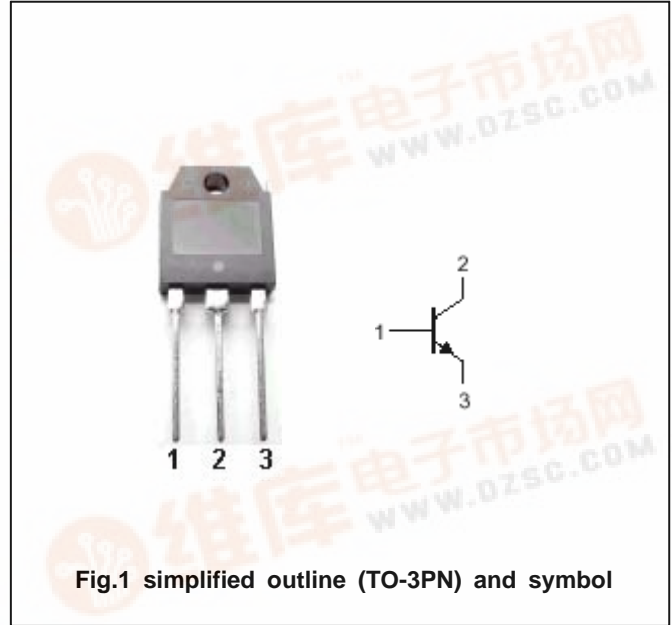


Fig.1 simplified outline (TO-3PN) and symbol

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	300	V
V _{CEO}	Collector-emitter voltage	Open base	300	V
V _{EBO}	Emitter-base voltage	Open collector	6	V
I _c	Collector current		2	A
I _{CM}	Collector current-Peak		4	A
P _c	Collector power dissipation	T _C =25°C	50	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 ; I _B =0	300			V
V _{(BR)CBO}	Emitter-base breakdown voltage	I _C =1mA ; I _E =0	300			V
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =1.5A ; I _B =0.3A			1.0	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =1.5A ; I _B =0.3A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =300V I _E =0			100	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =6V ; I _C =0			100	μ A
h _{FE}	DC current gain	I _C =0.3A ; V _{CE} =4V	50			
f _T	Transition frequency	I _C =0.3A ; V _{CE} =12V		20		MHz

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PACKAGE OUTLINE

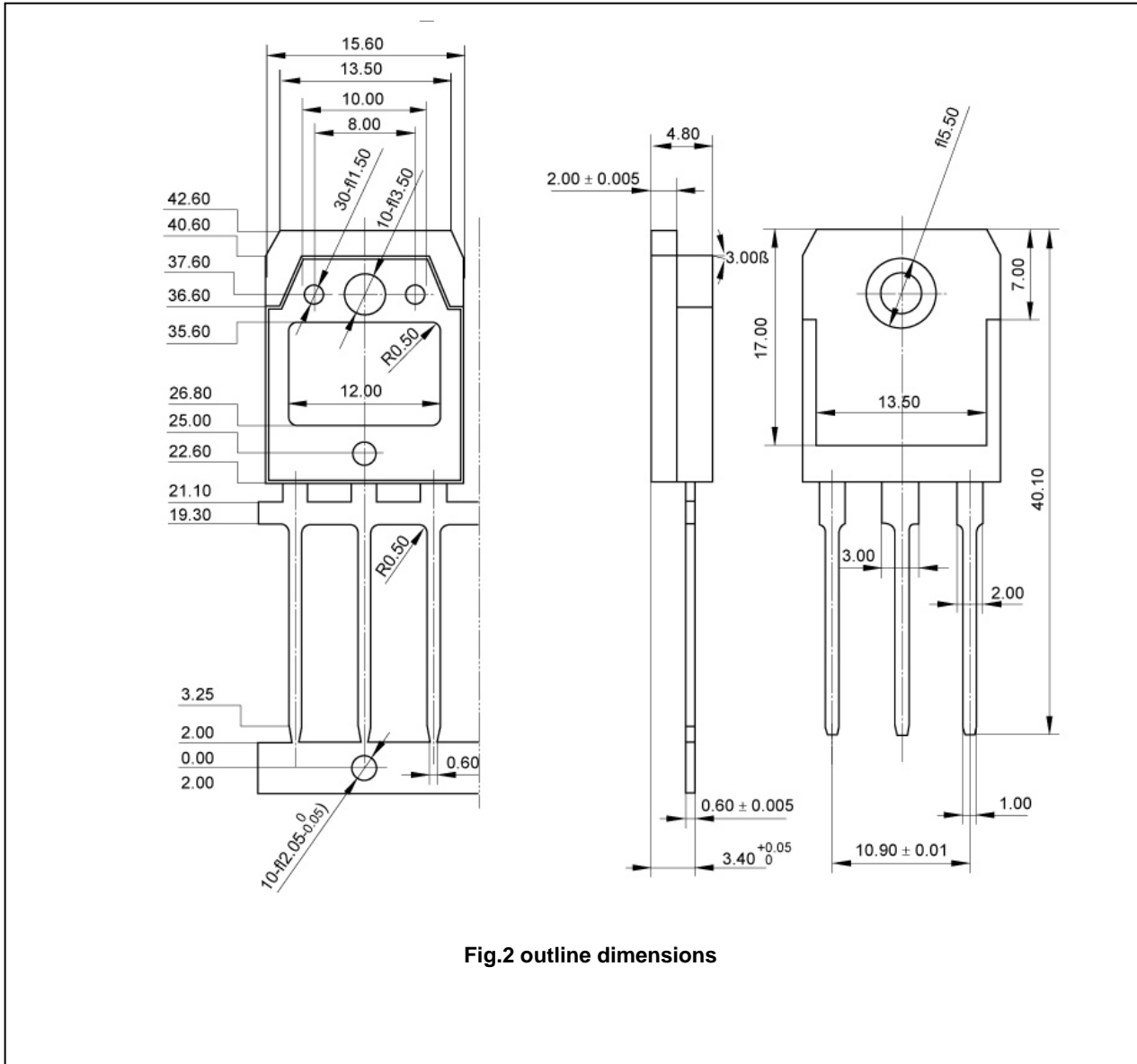


Fig.2 outline dimensions