

Silicon NPN Power Transistors

2SC2437

DESCRIPTION

- With TO-3 package
- High voltage,high speed switching
- High reliability

APPLICATIONS

- Switching regulators
- DC-DC convertor
- Solid state relay
- General purpose power amplifiers

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

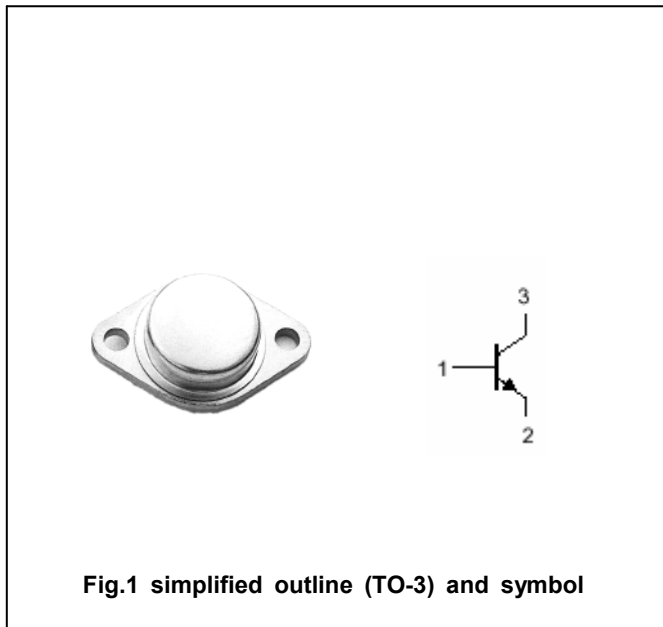


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	450	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 _B	Base current		2	A
P _C	Collector power dissipation	T _C =25□	100	W
T _j	Junction temperature		150	□
T _{stg}	Storage temperature		-55~150	□

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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	400			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA ; I _E =0	450			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =0.1mA ; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =7A; I _B =1.4A			1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =7A; I _B =1.4A			1.2	V
I _{CBO}	Collector cut-off current	V _{CB} =450V; I _E =0			1.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			0.1	mA
h _{FE}	DC current gain	I _C =3A ; V _{CE} =4V	10			

Switching times

t _{on}	Turn-on time	I _C =7A; I _{B1} =-I _{B2} =1.4A R _L =30Ω; P _W =20μs; Duty≤2%			1.5	μs
t _{stg}	Storage time				3.0	μs
t _f	Fall time				1.5	μs

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PACKAGE OUTLINE



Fig.2 outline dimensions (unindicated tolerance:±0.1mm)