

Silicon NPN Power Transistors

2SC1419

DESCRIPTION

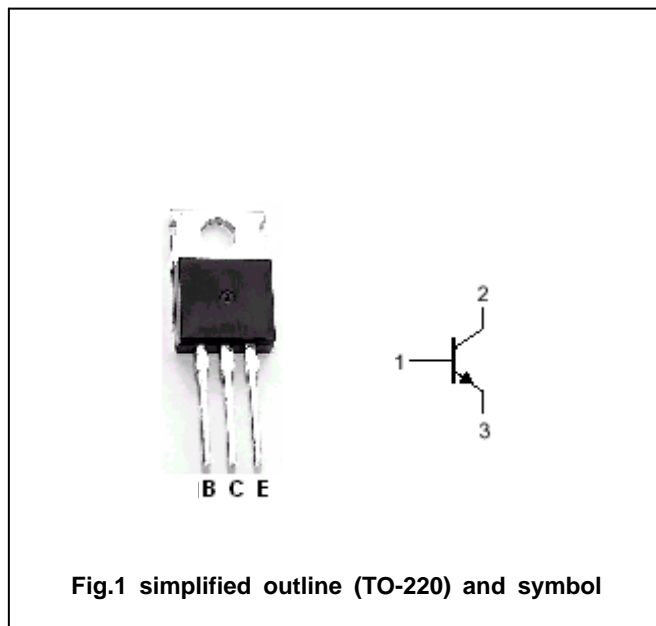
- With TO-220 package
- Large collector power dissipation

APPLICATIONS

- For medium power amplifier applications

PINNING

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

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	50	V
V_{CEO}	Collector-emitter voltage	Open base	50	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		2	A
I_{CM}	Collector current-peak		3	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	20	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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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 =30mA, I _B =0	50			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA, I _E =0	50			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA, I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =1A; I _B =0.1A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =1A; I _B =0.1A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =50V; I _E =0			100	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			100	μ A
h _{FE}	DC current gain	I _C =1A; V _{CE} =4V	35		320	
f _T	Transition frequency	I _C =0.5A; V _{CE} =10V		5		MHz

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PACKAGE OUTLINE

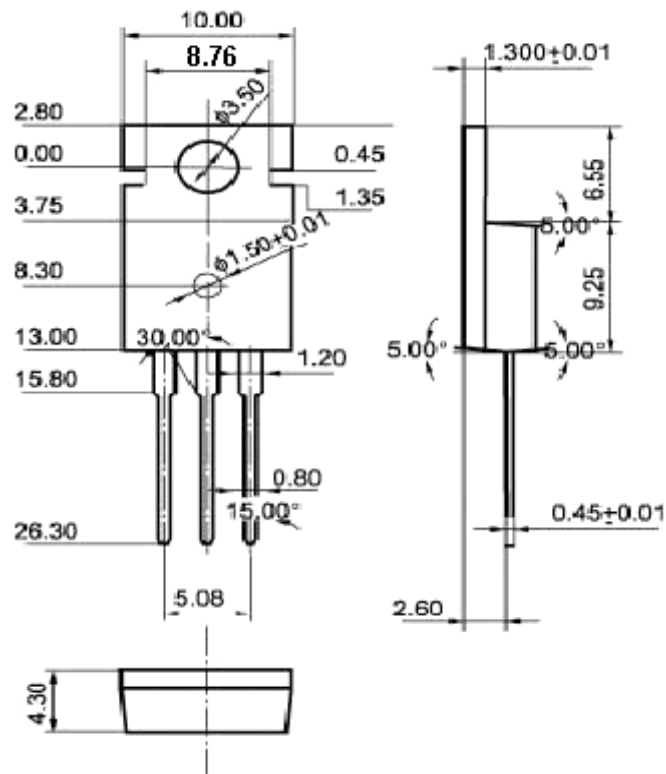


Fig.2 Outline dimensions(unindicated tolerance: ± 0.10 mm)