

Silicon NPN Power Transistors

BD949

DESCRIPTION

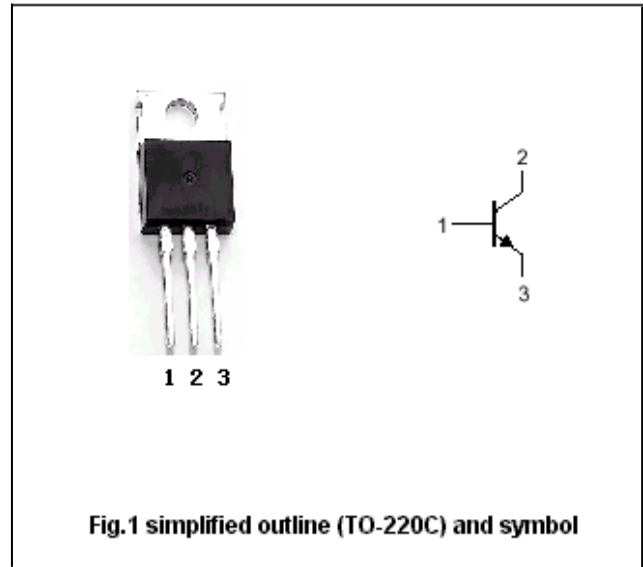
- With TO-220C package
- Low collector saturation voltage
- High current capability

APPLICATIONS

- For medium power linear and switching 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	60	V
V_{CEO}	Collector-emitter voltage	Open base	60	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		5	A
P_C	Collector dissipation	$T_C=25^{\circ}\text{C}$	40	W
T_j	Junction temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-50~150	$^{\circ}\text{C}$

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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 =10mA; I _B =0	60			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =2A; I _B =0.2A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =2A; I _B =0.2A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =60V; I _E =0			50	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			50	μ A
h _{FE-1}	DC current gain	I _C =0.5A ; V _{CE} =4V	40			
h _{FE-2}	DC current gain	I _C =2A ; V _{CE} =4V	20			
f _T	Transition frequency	I _C =0.5A ; V _{CE} =4V	3			MHz

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PACKAGE OUTLINE

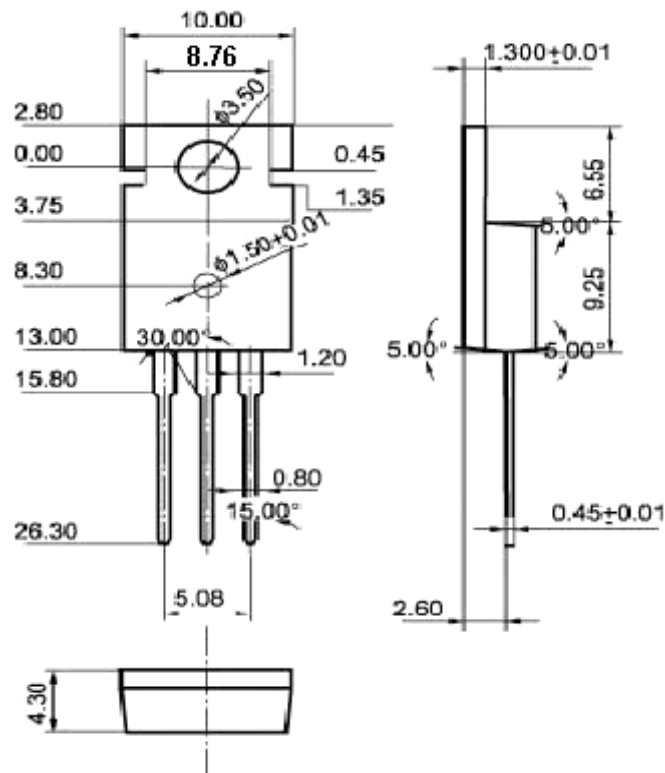


Fig.2 Outline dimensions (unindicated tolerance: ±0.10mm)