

Silicon PNP Power Transistors

BD242/A/B/C

DESCRIPTION

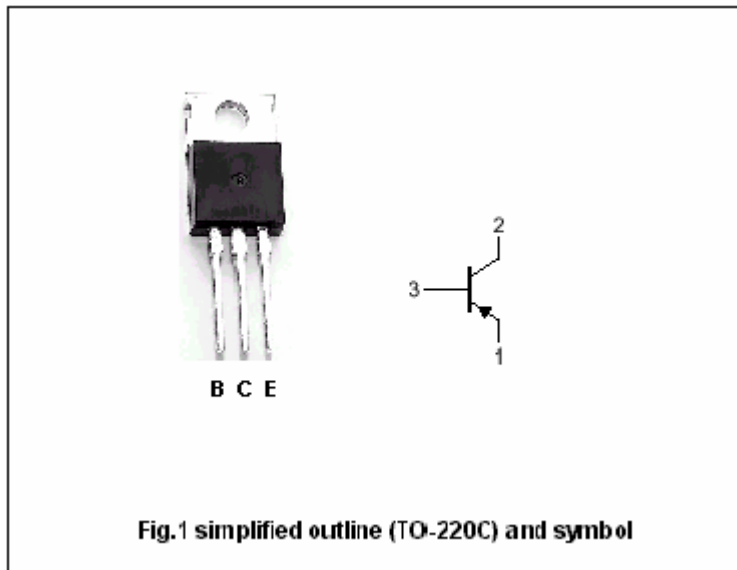
- With TO-220C package
- Complement to type BD241/A/B/C

APPLICATIONS

- For medium power linear and switching applications

PINNING

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



Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	BD242	-55	V
		BD242A	-70	
		BD242B	-90	
		BD242C	-115	
V _{CEO}	Collector-emitter voltage	BD242	-45	V
		BD242A	-60	
		BD242B	-80	
		BD242C	-100	
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-3	A
I _{CM}	Collector current-peak		-5	A
I _B	Base current		-1	A
P _C	Collector power dissipation	T _C =25°C	40	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-65~150	°C

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V _{CEO(SUS)}	Collector-emitter sustaining voltage	BD242	-45			V	
		BD242A	-60				
		BD242B	-80				
		BD242C	-100				
V _{CEsat}	Collector-emitter saturation voltage	I _C =-3A; I _B =-0.6 A			-1.2	V	
V _{BE}	Base-emitter on voltage	I _C =-3A ; V _{CE} =-4V			-1.8	V	
I _{CEO}	Collector cut-off current	BD242/A	V _{CE} =-30V; I _B =0			-0.3	mA
		BD242B/C	V _{CE} =-60V; I _B =0				
I _{CES}	Collector cut-off current	BD242	V _{CE} =-45V; V _{BE} =0			-0.2	mA
		BD242A	V _{CE} =-60V; V _{BE} =0				
		BD242B	V _{CE} =-80V; V _{BE} =0				
		BD242C	V _{CE} =-100V; V _{BE} =0				
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-1	mA	
h _{FE-1}	DC current gain	I _C =-1A ; V _{CE} =-4V	25				
h _{FE-2}	DC current gain	I _C =-3A ; V _{CE} =-4V	10				

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PACKAGE OUTLINE

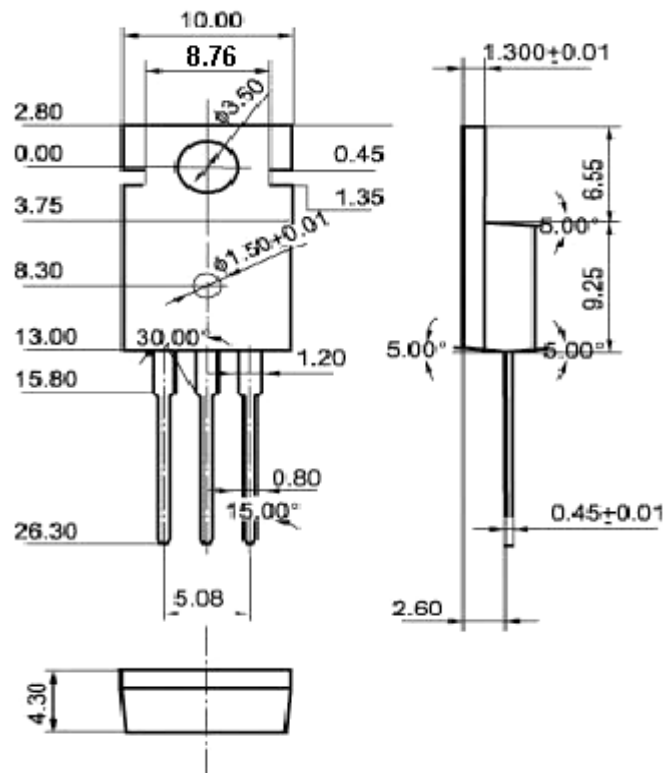


Fig.2 Outline dimensions (unindicated tolerance: ±0.10 mm)