

Silicon PNP Power Transistors

BD242/A/B/C

DESCRIPTION

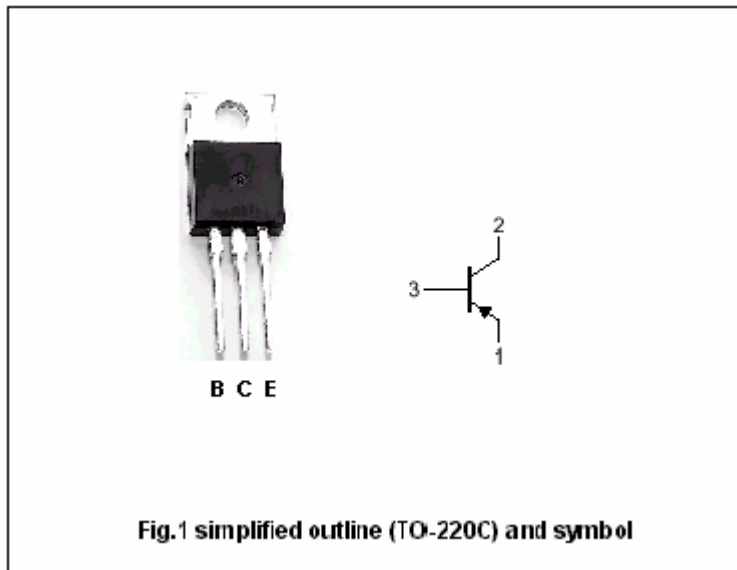
- With TO-220C package
- Complement to type BD241/A/B/C

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)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	BD242	Open emitter	-55	V
		BD242A		-70	
		BD242B		-90	
		BD242C		-115	
V_{CEO}	Collector-emitter voltage	BD242	Open base	-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		$T_C=25$	40	W
T_j	Junction temperature			150	
T_{stg}	Storage temperature			-65~150	

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CHARACTERISTICS

Tj=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	BD242	$I_C=30mA; I_B=0$	-45			V
		BD242A		-60			
		BD242B		-80			
		BD242C		-100			
V_{CEsat}	Collector-emitter saturation voltage		$I_C=-3A; I_B=-0.6A$			-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

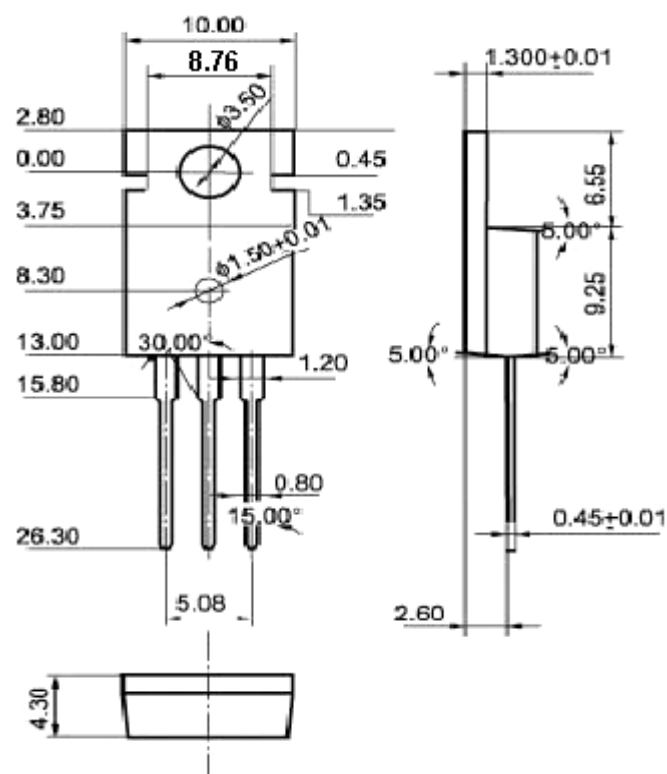


Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)