

Silicon NPN Power Transistors

BD241/A/B/C

DESCRIPTION

- With TO-220C package
- Complement to type BD242/A/B/C

APPLICATIONS

- For medium power linear and switching applications

PINNING

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

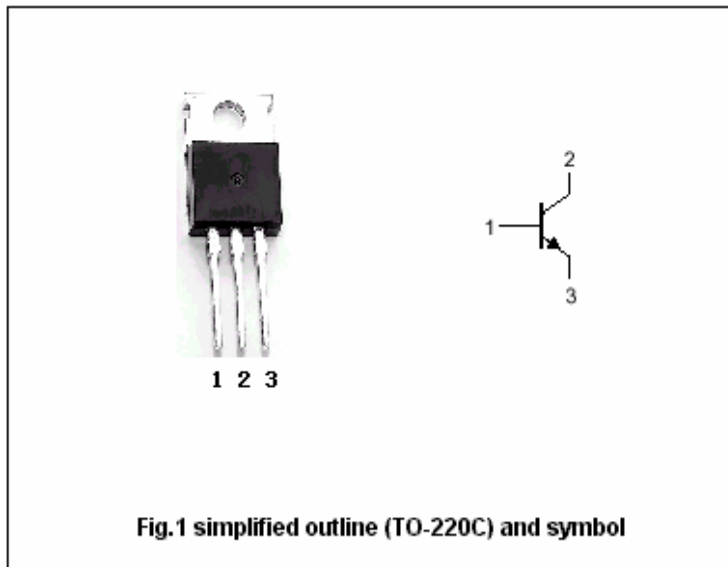


Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings (Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	BD241	55	V
		BD241A	70	
		BD241B	90	
		BD241C	115	
V _{CEO}	Collector-emitter voltage	BD241	45	V
		BD241A	60	
		BD241B	80	
		BD241C	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	

Silicon NPN Power Transistors

BD241/A/B/C

CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	BD241	45			V
		BD241A	60			
		BD241B	80			
		BD241C	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	BD241/A	V _{CE} =30V; I _B =0		0.3	mA
		BD241B/C	V _{CE} =60V; I _B =0			
I _{CES}	Collector cut-off current	BD241	V _{CE} =45V; V _{BE} =0		0.2	mA
		BD241A	V _{CE} =60V; V _{BE} =0			
		BD241B	V _{CE} =80V; V _{BE} =0			
		BD241C	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			

