

Silicon PNP Power Transistors

BD250/A/B/C

DESCRIPTION

- With TO-3PN package
- Complement to type BD249/A/B/C
- 125 W at 25°C case temperature
- 25 A continuous collector current

PINNING

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

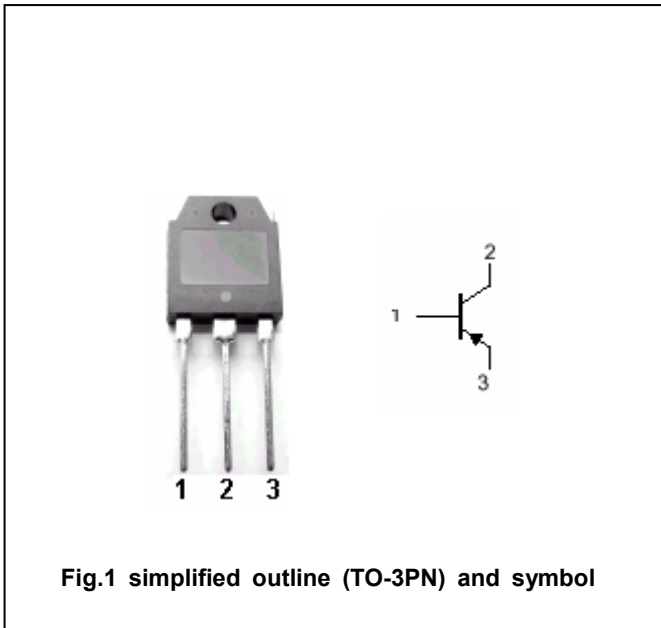


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	BD246	-55	V
		BD246A	-70	
		BD246B	-90	
		BD246C	-115	
V _{CEO}	Collector-emitter voltage	BD246	-45	V
		BD246A	-60	
		BD246B	-80	
		BD246C	-100	
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-25	A
I _{CM}	Collector current-peak		-40	A
I _B	Base current		-5	A
P _C	Collector power dissipation	T _C =25□	125	W
T _j	Junction temperature		-65~150	□
T _{stg}	Storage temperature		-65~150	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R _{th j-c}	Thermal resistance junction to case	1	□/W

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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	BD250	I _C =-30mA ; I _B =0	-45			V
		BD250A		-60			
		BD250B		-80			
		BD250C		-100			
V _{CEsat-1}	Collector-emitter saturation voltage		I _C =-15A ; I _B =-1.5A			-1.8	V
V _{CEsat-2}	Collector-emitter saturation voltage		I _C =-25A ; I _B =-5A			-4.0	V
V _{BE-1}	Base-emitter on voltage		I _C =-15A ; V _{CE} =-4V			-1.6	V
V _{BE-2}	Base-emitter on voltage		I _C =-25A ; V _{CE} =-4V			-3.0	V
I _{CEO}	Collector cut-off current	BD250/250A	V _{CE} =-30V I _B =0			-1.0	mA
		BD250B/250C	V _{CE} =-60V I _B =0				
I _{EBO}	Emitter cut-off current		V _{EB} =-5V ; I _C =0			-1.0	mA
h _{FE-1}	DC current gain		I _C =-1.5A ; V _{CE} =-4V	25			
h _{FE-2}	DC current gain		I _C =-15A ; V _{CE} =-4V	10			
h _{FE-3}	DC current gain		I _C =-25A ; V _{CE} =-4V	5			
Switching times							
t _{on}	Turn-on time		I _C =-5A; I _{B1} =-I _{B2} =-0.5A R _L =5Ω		0.2		μs
t _{off}	Turn-off time				0.4		μs

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PACKAGE OUTLINE

