

Silicon PNP Power Transistors

BD246/A/B/C

DESCRIPTION

- With TO-3PN package
- Complement to type BD245/A/B/C

APPLICATIONS

- For use in medium power linear and switching applications

PINNING

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

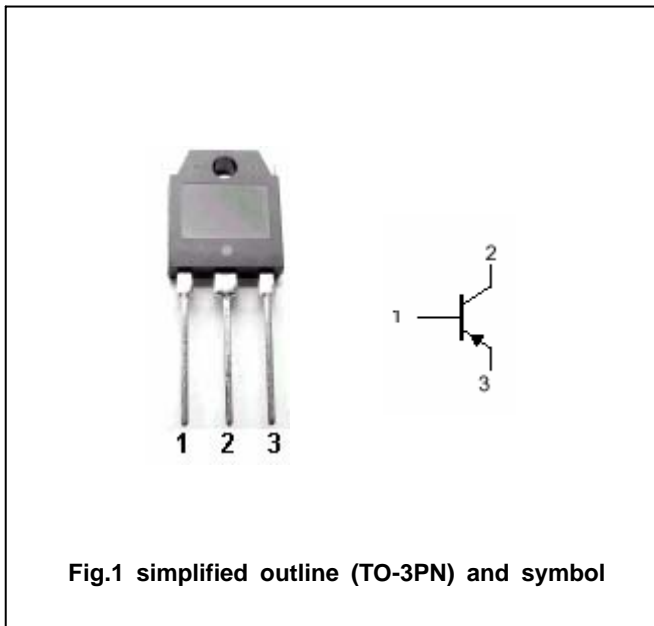


Fig.1 simplified outline (TO-3PN) and symbol

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	Open base	BD246	V	
			BD246A		-60
			BD246B		-80
			BD246C		-100
V _{EBO}	Emitter-base voltage	Open collector	-5	V	
I _C	Collector current		-10	A	
I _{CM}	Collector current-peak		-15	A	
I _B	Base current		-3	A	
P _C	Collector power dissipation	T _C =25	80	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	1.56	/W

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO}	Collector-emitter breakdown voltage	BD246	I _C =30mA ; I _B =0	-45			V
		BD246A		-60			
		BD246B		-80			
		BD246C		-100			
V _{CEsat-1}	Collector-emitter saturation voltage		I _C =-3A ; I _B =-0.3A			-1.0	V
V _{CEsat-2}	Collector-emitter saturation voltage		I _C =-10A ; I _B =-2.5A			-4.0	V
V _{BE-1}	Base-emitter on voltage		I _C =-3A ; V _{CE} =-4V			-1.6	V
V _{BE-2}	Base-emitter on voltage		I _C =-10A ; V _{CE} =-4V			-3.0	V
I _{CEO}	Collector cut-off current	BD246/246A	V _{CE} =-30V ; I _B =0			-0.7	mA
		BD246B/246C	V _{CE} =-60V ; I _B =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	40			
h _{FE-2}	DC current gain		I _C =-3A ; V _{CE} =-4V	20			
h _{FE-3}	DC current gain		I _C =-10A ; V _{CE} =-4V	4			
Switching times							
t _{on}	Turn-on time		I _C =-1A ; I _{B1} =-I _{B2} =-0.1A R _L =20		0.2		μs
t _{off}	Turn-off time				0.8		μs

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PACKAGE OUTLINE

