

Silicon NPN Power Transistors

2N6129 2N6130 2N6131

DESCRIPTION

- With TO-220 package
- High power dissipation
- Complement to PNP type :
2N6132 2N6133 2N6134

APPLICATIONS

- Power amplifier and medium speed switching applications

PINNING

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

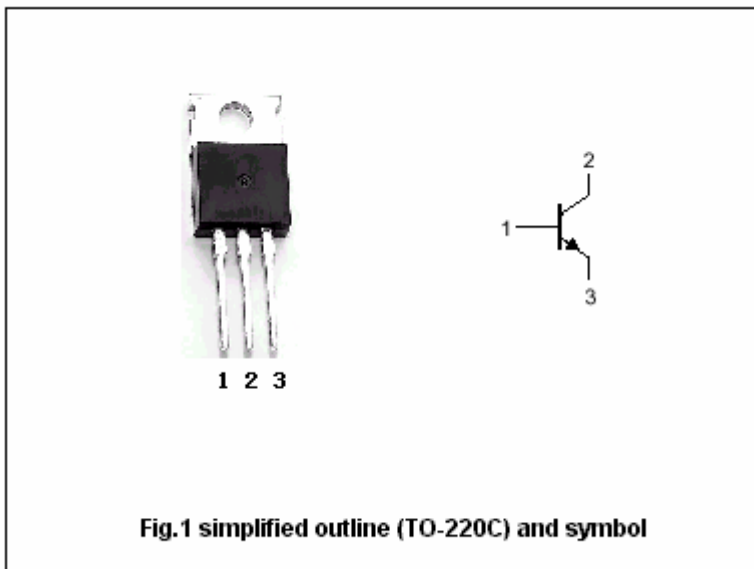


Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2N6129	40	V
		2N6130	60	
		2N6131	80	
V _{CEO}	Collector-emitter voltage	2N6129	40	V
		2N6130	60	
		2N6131	80	
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		7	A
I _B	Base current		3	A
P _T	Total power dissipation	T _C =25°C	50	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal resistance from junction to case	2.5	°C/W

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-emitter sustaining voltage	2N6129	I _C =0.1A ; I _B =0			V
		2N6130				
		2N6131				
V _{CEsat}	Collector-emitter saturation voltage	2N6129	I _C =7A; I _B =1.2A			V
		2N6130				
		2N6131				
V _{BE}	Base-emitter on voltage	I _C =2.5A ; V _{CE} =4V			1.4	V
I _{CEV}	Collector cut-off current	2N6129	V _{CE} =40V; V _{BE} =1.5V T _C =150 °C			mA
		2N6130	V _{CE} =60V; V _{BE} =1.5V T _C =150 °C			
		2N6131	V _{CE} =80V; V _{BE} =1.5V T _C =150 °C			mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			1.0	mA
h _{FE}	DC current gain	I _C =2.5A ; V _{CE} =4V	20		100	
f _T	Transition frequency	I _C =0.2A ; V _{CE} =4V	2.5			MHz

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PACKAGE OUTLINE

