

Silicon PNP Power Transistors

2N6124 2N6125 2N6126

DESCRIPTION

- With TO-220 package
- Complement to PNP type :
2N6121 ;2N6122 ;2N6123

APPLICATIONS

- For use in power amplifier and switching circuit applications

PINNING

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

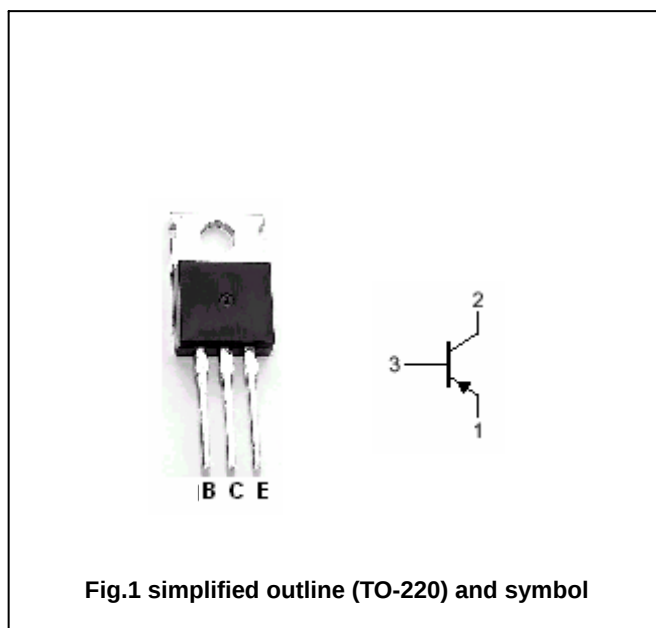


Fig.1 simplified outline (TO-220) and symbol

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2N6124	Open emitter	-45	V
		2N6125		-60	
		2N6126		-80	
V_{CEO}	Collector-emitter voltage	2N6124	Open base	-45	V
		2N6125		-60	
		2N6126		-80	
V_{EBO}	Emitter-base voltage		Open collector	-5	V
I_C	Collector current			-4	A
I_{CM}	Collector current-peak			-8	A
I_B	Base current			-1	A
P_T	Total power dissipation		$T_C=25$	40	W
T_j	Junction temperature			150	
T_{stg}	Storage temperature			-65~150	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal resistance from junction to case	3.125	/W

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	2N6124	I _C =-0.1A ; I _B =0	-45			V
		2N6125		-60			
		2N6126		-80			
V _{CEsat-1}	Collector-emitter saturation voltage		I _C =-1.5A ; I _B =-0.15A			-0.6	V
V _{CEsat-2}	Collector-emitter saturation voltage		I _C =-4.0A ; I _B =-1.0A			-1.4	V
V _{BE(on)}	Base-emitter on voltage		I _C =-1.5A ; V _{CE} =-2V			-1.2	V
I _{CEX}	Collector cut-off current	2N6124	V _{CE} =-45V ; V _{BE} =1.5V T _C =125			-0.1 -2.0	mA
		2N6125	V _{CE} =-60V ; V _{BE} =1.5V T _C =125			-0.1 -2.0	
		2N6126	V _{CE} =-80V ; V _{BE} =1.5V T _C =125			-0.1 -2.0	
I _{CEO}	Collector cut-off current	2N6124	V _{CE} =-45V ; I _B =0			-1.0	mA
		2N6125	V _{CE} =-60V ; I _B =0				
		2N6126	V _{CE} =-80V ; I _B =0				
I _{EBO}	Emitter cut-off current		V _{EB} =-5V ; I _C =0			-1.0	mA
h _{FE-1}	DC current gain	2N6124	I _C =-1.5A ; V _{CE} =-2V	25		100	
		2N6125					
		2N6126		20		80	
h _{FE-2}	DC current gain	2N6124	I _C =-4A ; V _{CE} =-2V	10			
		2N6125					
		2N6126		7			
f _T	Transition frequency		I _C =-1A ; V _{CE} =-4V	2.5			MHz

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PACKAGE OUTLINE

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