

Silicon PNP Power Transistors

2N6107 2N6109 2N6111

DESCRIPTION

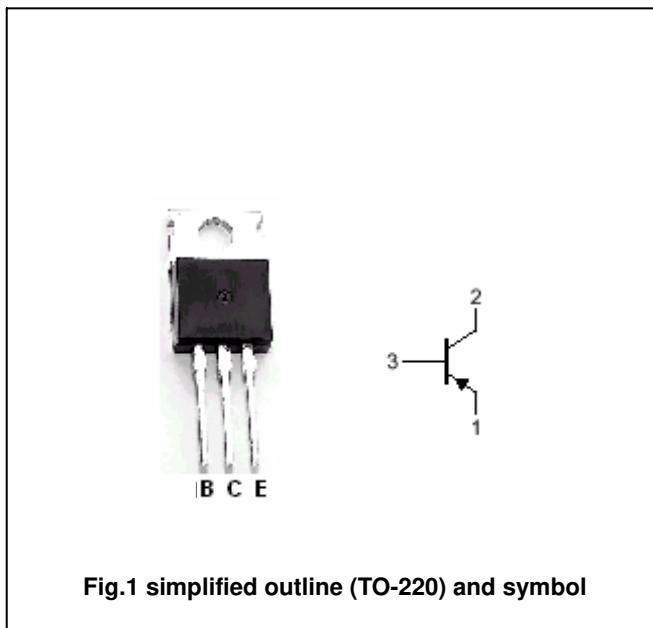
With TO-220 package
 Complement to NPN type:
 2N6288; 2N6290 ;2N6292

APPLICATIONS

Power amplifier and switching
 circuits applications

PINNING

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



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2N6107	-40	V
		2N6109	-60	
		2N6111	-80	
V _{CEO}	Collector-emitter voltage	2N6107	-30	V
		2N6109	-50	
		2N6111	-70	
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-7	A
I _{CM}	Collector current-peak		-10	A
I _B	Base current		-3	A
P _T	Total power dissipation	T _C =25°C	40	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	3.125	°C/W

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V _{CEO(SUS)}	Collector-emitter sustaining voltage	2N6107	I _C =-0.1A ; I _B =0	-30		V	
		2N6109		-50			
		2N6111		-70			
V _{CEsat}	Collector-emitter saturation voltage	I _C =-7A ; I _B =-3A			-3.5	V	
V _{BE}	Base-emitter on voltage	I _C =-7A ; V _{CE} =-4V			-3.0	V	
I _{CEO}	Collector cut-off current	2N6107				mA	
		2N6109					V _{CE} =-40V ; I _B =0
		2N6111					V _{CE} =-60V ; I _B =0
I _{CEX}	Collector cut-off current	2N6107				mA	
		2N6109					V _{CE} =-60V ; V _{BE} =-1.5V V _{CE} =-50V ; V _{BE} =-1.5V, T _C =125°C
		2N6111					V _{CE} =-80V ; V _{BE} =-1.5V V _{CE} =-70V ; V _{BE} =-1.5V, T _C =125°C
I _{EBO}	Emitter cut-off current	V _{EB} =-5V ; I _C =0			-1.0	mA	
h _{FE-1}	DC current gain	2N6107		30		150	
		2N6109					I _C =-2.5A ; V _{CE} =-4V
		2N6111					I _C =-3A ; V _{CE} =-4V
h _{FE-2}	DC current gain	I _C =-7A ; V _{CE} =-4V	2.3				
f _T	Transition frequency	I _C =-0.5A ; V _{CE} =-4V ; f=1MHz	10			MHz	

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PACKAGE OUTLINE



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