

Silicon PNP Power Transistors

2N6106 2N6108 2N6110

DESCRIPTION

- With TO-220 package
- With short pin

APPLICATIONS

- Power amplifier and switching circuits applications

PINNING

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

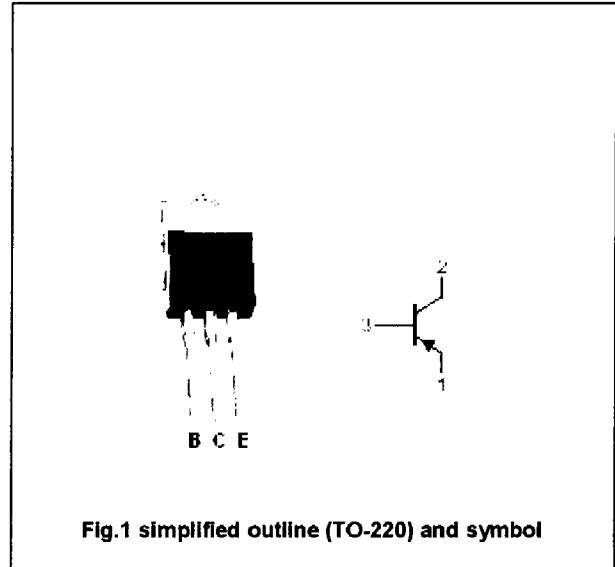


Fig.1 simplified outline (TO-220) and symbol

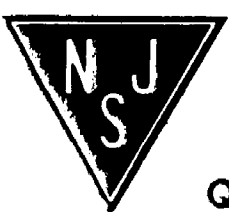
Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CB0}	Collector-base voltage	2N6106	-40	V
		2N6108	-60	
		2N6110	-80	
V _{CEO}	Collector-emitter voltage	2N6106	-30	V
		2N6108	-50	
		2N6110	-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 _{CE(SUS)}	Collector-emitter sustaining voltage	2N6106	-30			V	
		2N6108	-50				
		2N6110	-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	2N6106	V _{CE} =-20V; I _B =0			-1.0	mA
		2N6108	V _{CE} =-40V; I _B =0				
		2N6110	V _{CE} =-60V; I _B =0				
I _{CEX}	Collector cut-off current	2N6106	V _{CE} =-40V; V _{BE} =1.5V V _{CE} =-30V; V _{BE} =1.5V, T _C =125L			-0.1 -2.0	mA
		2N6108	V _{CE} =-60V; V _{BE} =1.5V V _{CE} =-50V; V _{BE} =1.5V, T _C =125L			-0.1 -2.0	
		2N6110	V _{CE} =-80V; V _{BE} =1.5V V _{CE} =-70V; V _{BE} =1.5V, T _C =125L			-0.1 -2.0	
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-1.0	mA	
h _{FE-1}	DC current gain	2N6106	I _C =-2A; V _{CE} =-4V	30	150		
		2N6108	I _C =-2.5A; V _{CE} =-4V				
		2N6110	I _C =-3A; V _{CE} =-4V				
h _{FE-2}	DC current gain	I _C =-7A; V _{CE} =-4V	2.3				
C _{OB}	Output capacitance	I _E =0; V _{CB} =-10V; f=1MHz			250	pF	
f _T	Transition frequency	I _C =-0.5A; V _{CE} =-4V; f=1MHz	10			MHz	

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PACKAGE OUTLINE

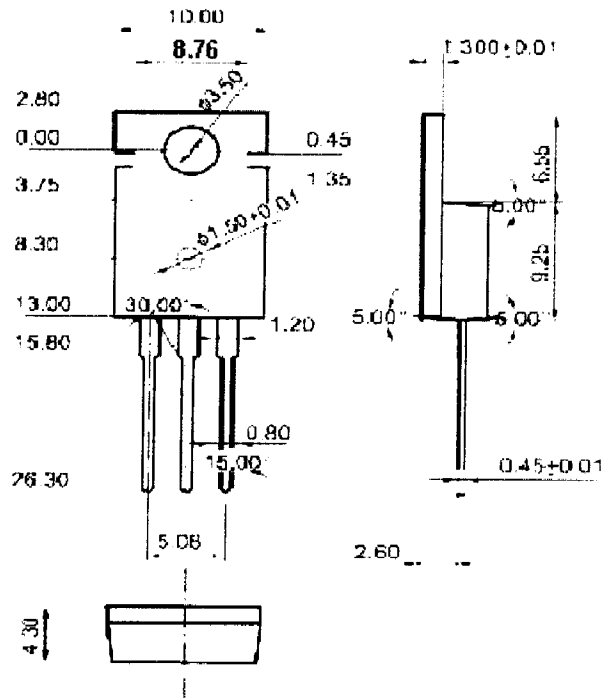


Fig.2 Outline dimensions(unindicated tolerance:±0.10 mm)