

Silicon PNP Power Transistors

2N6489 2N6490 2N6491

DESCRIPTION

With TO-220 package
 Excellent safe operating area
 Complement to type 2N6486 2N6487
 2N6488 respectively

APPLICATIONS

Power amplifier and medium speed
 switching applications

PINNING

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

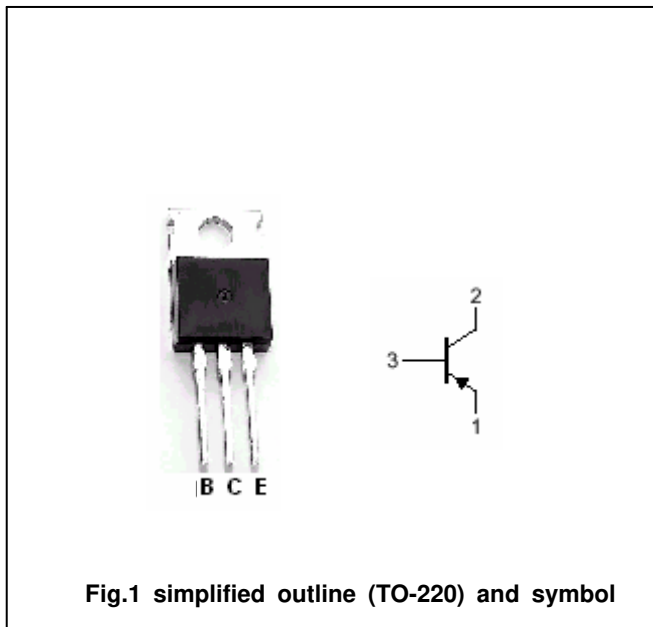


Fig.1 simplified outline (TO-220) and symbol

Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2N6489	-50	V
		2N6490	-70	
		2N6491	-90	
V _{CEO}	Collector-emitter voltage	2N6489	-40	V
		2N6490	-60	
		2N6491	-80	
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-15	A
I _B	Base current		-5	A
P _T	Total power dissipation	T _C =25°C	75	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	1.67	°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	2N6489	I _C =-0.2A ; I _B =0	-40			V
		2N6490		-60			
		2N6491		-80			
V _{CEsat-1}	Collector-emitter saturation voltage		I _C =-5A; I _B =-0.5A			-1.3	V
V _{CEsat-2}	Collector-emitter saturation voltage		I _C =-15A; I _B =-5A			-3.5	V
V _{BE-1}	Base-emitter on voltage		I _C =-5A ; V _{CE} =-4V			-1.3	V
V _{BE-2}	Base-emitter on voltage		I _C =-15A ; V _{CE} =-4V			-3.5	V
I _{CEX}	Collector cut-off current V _{BE} =-1.5V	2N6489	V _{CE} =-45V; V _{CE} =-40V; T _C =150°C			-0.5 -5.0	mA
		2N6490	V _{CE} =-65V; V _{CE} =-60V; T _C =150°C			-0.5 -5.0	
		2N6491	V _{CE} =-85V; V _{CE} =-80V; T _C =150°C			-0.5 -5.0	
I _{CEO}	Collector cut-off current	2N6489	V _{CE} =-20V; I _B =0			-1.0	mA
		2N6490	V _{CE} =-30V; I _B =0				
		2N6491	V _{CE} =-40V; I _B =0				
I _{EBO}	Emitter cut-off current		V _{EB} =-5V; I _C =0			-1.0	mA
h _{FE-1}	DC current gain		I _C =-5A ; V _{CE} =-4V	20		150	
h _{FE-2}	DC current gain		I _C =-15A ; V _{CE} =-4V	5			

