

Silicon PNP Power Transistors

2SB509

DESCRIPTION

- With TO-66 package
- Complement to type 2SD315

APPLICATIONS

- For use in audio frequency power amplifier application

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

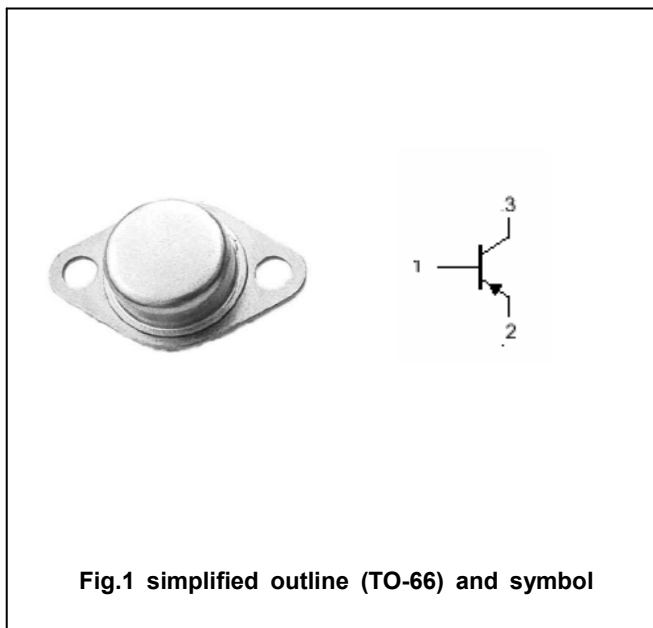


Fig.1 simplified outline (TO-66) and symbol

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	-60	V
V _{CEO}	Collector-emitter voltage	Open base	-60	V
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-4	A
I _{CM}	Collector current-peak		-10	A
P _C	Collector power dissipation	T _C =25□	35	W
T _j	Junction temperature		150	□
T _{stg}	Storage temperature		-40~150	□

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-10mA ; I _B =0	-60			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-2A; I _B =-0.2A			-1.0	V
V _{BE}	Base-emitter on voltage	I _C =-1A ; V _{CE} =-2V			-1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =-20V; I _E =0			-0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =-4V; I _C =0			-1.0	mA
h _{FE-1}	DC current gain	I _C =-1A ; V _{CE} =-2V	40		320	
h _{FE-2}	DC current gain	I _C =-0.1A ; V _{CE} =-2V	40			
f _T	Transition frequency	I _C =-0.5A ; V _{CE} =-5V		8		MHz

◆ h_{FE-1} Classifications

C	D	E	F
40-80	60-120	100-200	160-320

PACKAGE OUTLINE



Fig.2 outline dimensions