Silicon PNP Power Transistors 2SB1101

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DESCRIPTION
·With TO-220 package
·Complement to type 2SD1601
·DARLINGTON
·High DC current gain

APPLICATIONS
·For low frequency power amplifier applications

PINNING

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

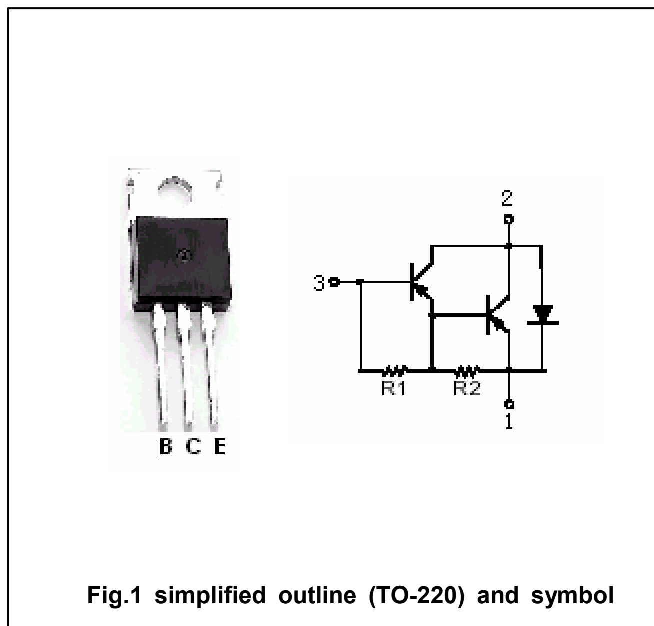

Fig.1 simplified outline (TO-220) and symbol

Absolute maximum ratings(Ta=25)

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	-7	V
I_C	Collector current		-4	A
I_{CM}	Collector current-peak		-8	A
P_C	Collector power dissipation	T_C=25	40	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

Tj=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=-25mA ,I_B=0	-60			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=-50mA ,I_C=0	-7			V
$V_{CEsat\ -1}$	Collector-emitter saturation voltage	I_C=-2A; I_B=-4mA			-1.5	V
$V_{CEsat\ -2}$	Collector-emitter saturation voltage	I_C=-4A; I_B=-40mA			-3.0	V
$V_{BEsat-1}$	Base-emitter saturation voltage	I_C=-2A; I_B=-4mA			-2.0	V
$V_{BEsat-2}$	Base-emitter saturation voltage	I_C=-4A; I_B=-40mA			-3.5	V
I_{CBO}	Collector cut-off current	V_{CB}=-60V; I_E=0			-100	μA
I_{CEO}	Collecto cut-off current	V_{CE}=-50V; R_{BE}=∞			-10	μA
h_{FE}	DC current gain	I_C=-2A ; V_{CE}=-3V	1000		20000	
V_D	Diode forward voltage	I_D=4A;			3.0	V

Switching times

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
t_{on}	Turn-on time	I_C=-2A I_{B1}=-I_{B2}=-4mA		0.8		μs
t_s	Storage time			4.0		μs
t_f	Fall time			1.0		μs

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PACKAGE OUTLINE

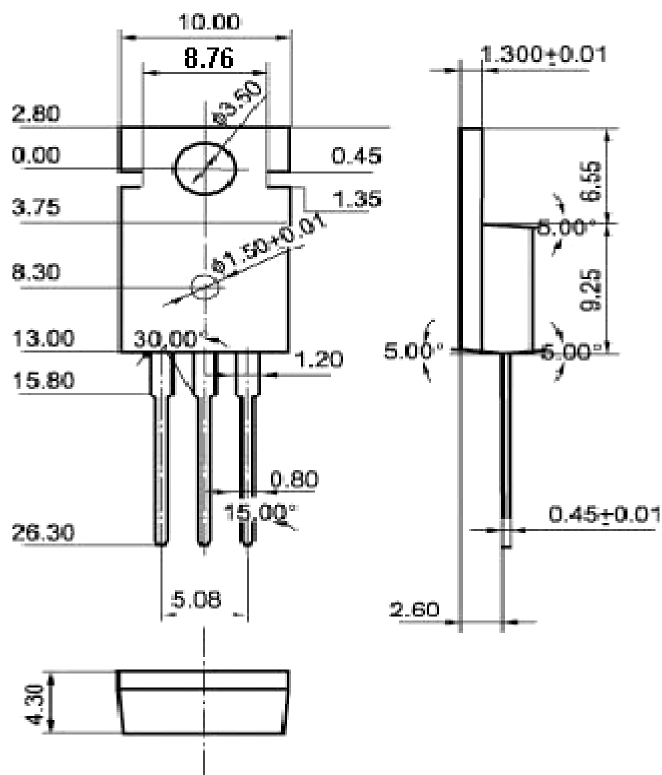

Fig.2 Outline dimensions(unindicated tolerance:±0.10 mm)

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