

Silicon PNP Power Transistors

2SB1105

DESCRIPTION

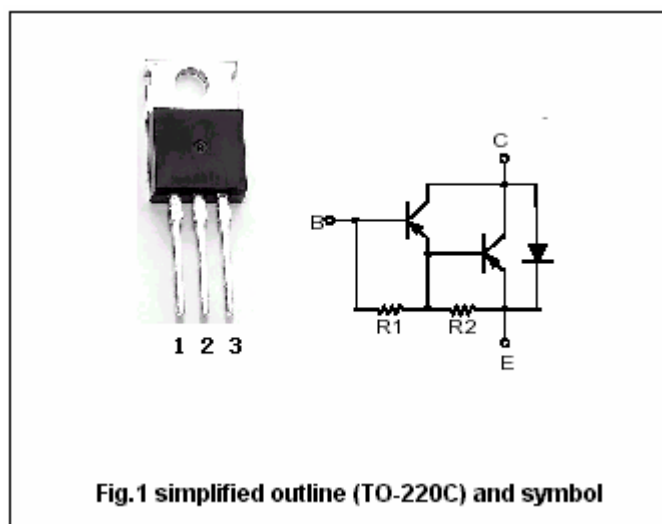
- With TO-220C package
- DARLINGTON
- High DC current gain
- Complement to type 2SD1605

APPLICATIONS

- Designed for use in low frequency power amplifier applications

PINNING

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

Absolute maximum ratings($T_c=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-120	V
V_{CEO}	Collector-emitter voltage	Open base	-120	V
V_{EBO}	Emitter-base voltage	Open collector	-7	V
I_C	Collector current-DC		-3	A
P_C	Collector power dissipation	$T_c=25^\circ\text{C}$	30	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-25mA, R_{BE}=\infty$	-120			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-50mA, I_C=0$	-7			V
$V_{CEsat-1}$	Collector-emitter saturation voltage	$I_C=-1.5A, I_B=-3mA$			-1.5	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	$I_C=-3A, I_B=-30mA$			-3.0	V
$V_{BEsat-1}$	Base-emitter saturation voltage	$I_C=-1.5A, I_B=-3mA$			-2.0	V
$V_{BEsat-2}$	Base-emitter saturation voltage	$I_C=-3A, I_B=-30mA$			-3.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=-120V, I_E=0$			-100	μA
I_{CEO}	Collector cut-off current	$V_{CE}=-100V, R_{BE}=\infty$			-10	μA
h_{FE}	DC current gain	$I_C=-1.5A; V_{CE}=-3V$	1000			
V_D	Diode forward voltage	$I_D=-3A$			3.0	V

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PACKAGE OUTLINE

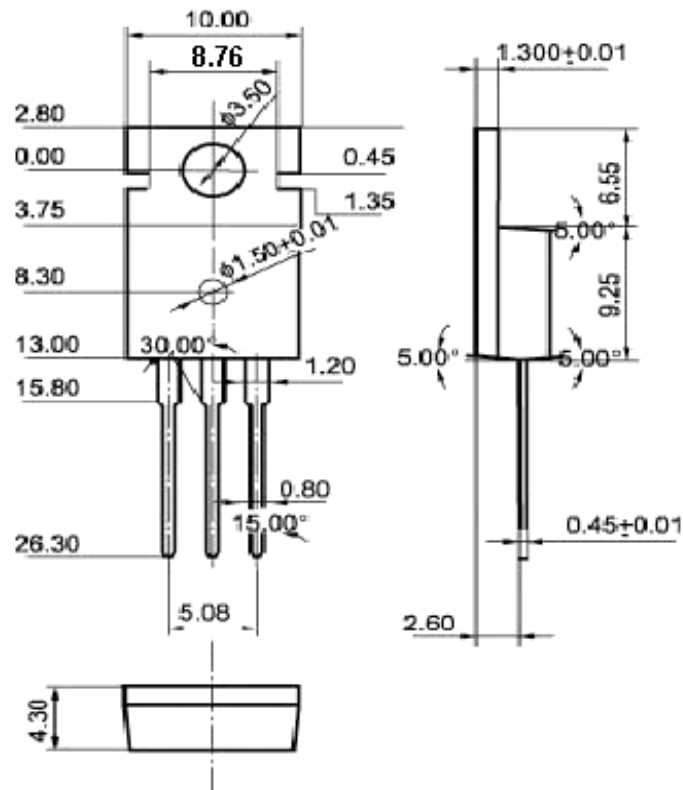


Fig.2 Outline dimensions