

## Silicon PNP Power Transistors

## 2SB676

## DESCRIPTION

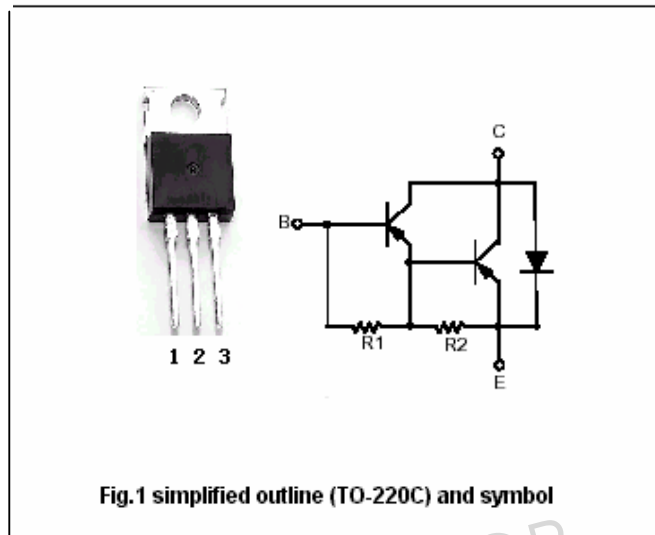
- With TO-220C package
- High DC Current Gain  
:  $h_{FE}=2000$  @  $V_{CE}=-2V$ ,  $I_C=-1A$  (Min.)
- DARLINGTON

## APPLICATIONS

- For switching applications
- Hammer drive, pulse motor drive applications
- Power amplifier applications

## PINNING

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

Absolute maximum ratings( $T_a=25^\circ C$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-100	V
$V_{CEO}$	Collector-emitter voltage	Open base	-80	V
$V_{EBO}$	Emitter-base voltage	Open collector	-5	V
$I_C$	Collector current-DC		-4	A
$P_C$	Collector power dissipation	$T_C=25$	30	W
$T_j$	Junction temperature		150	
$T_{stg}$	Storage temperature		-55~150	

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## CHARACTERISTICS

T<sub>j</sub>=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =-10mA, I <sub>B</sub> =0	-80			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-3A, I <sub>B</sub> =-6mA			-1.5	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =-3A, I <sub>B</sub> =-6mA			-2.0	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-100V, I <sub>E</sub> =0			-20	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-2.5	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-1A; V <sub>CE</sub> =-2V	2000			
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-3A; V <sub>CE</sub> =-2V	1000			

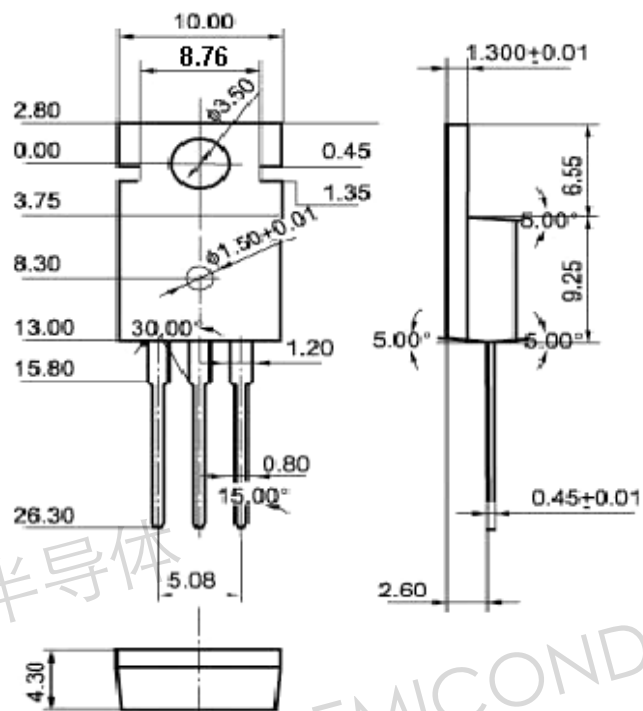
## Switching times

t <sub>on</sub>	Turn-on time	V <sub>CE</sub> =-30V, I <sub>B1</sub> =-I <sub>B2</sub> =-6mA R <sub>L</sub> =10		0.15		μs
t <sub>s</sub>	Storage time			0.80		μs
t <sub>f</sub>	Fall time			0.40		μs

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## PACKAGE OUTLINE



**Fig.2 Outline dimensions**