

Silicon PNP Power Transistors

2SB975

DESCRIPTION

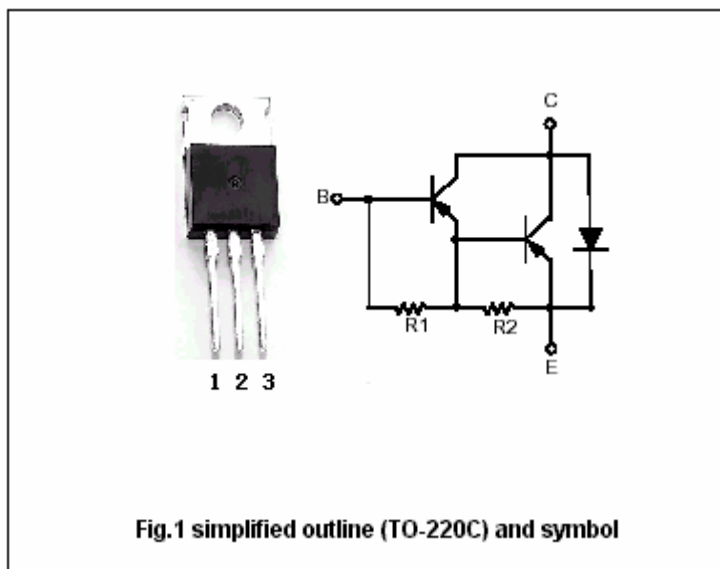
- With TO-220 package
- DARLINGTON
- High DC current gain
- Low collector saturation voltage

APPLICATIONS

- Low frequency power amplification
- Low speed power switching applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-100	V
V_{CEO}	Collector-emitter voltage	Open base	-100	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-8	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	40	W
		$T_a=25^\circ\text{C}$	1.5	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

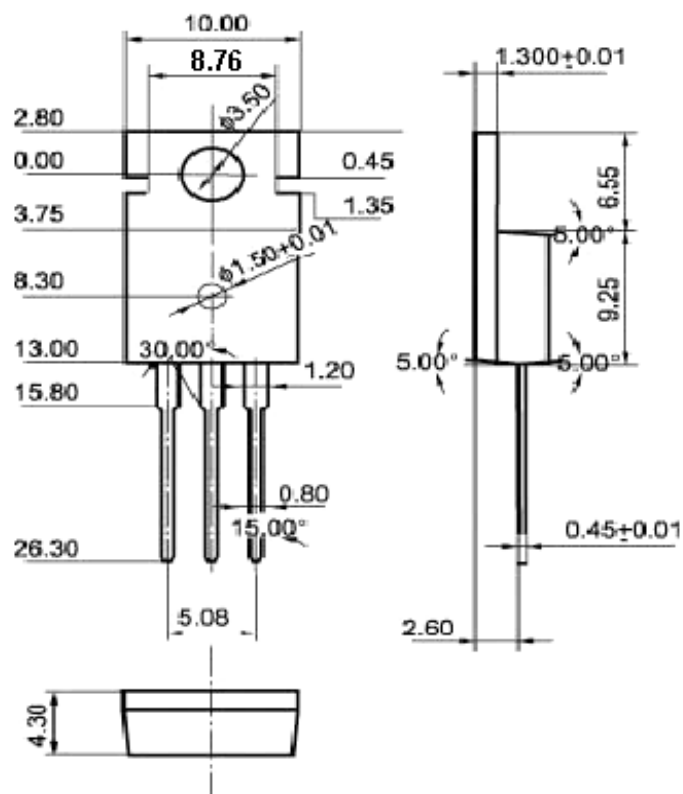
T_j=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =-30mA ; I _B =0	-100			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-1mA ; I _E =0	-100			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-5mA ; I _C =0	-5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-3A; I _B =-3mA			-1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-3A; I _B =-3mA			-2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-100V; I _E =0			-1	μA
I _{CEO}	Collector cut-off current	V _{CE} =-50V; I _B =0			-100	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-5.0	mA
h _{FE}	DC current gain	I _C =-3A ; V _{CE} =-2V	2000		15000	

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PACKAGE OUTLINE

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