

Silicon PNP Power Transistors

2SB1658

DESCRIPTION

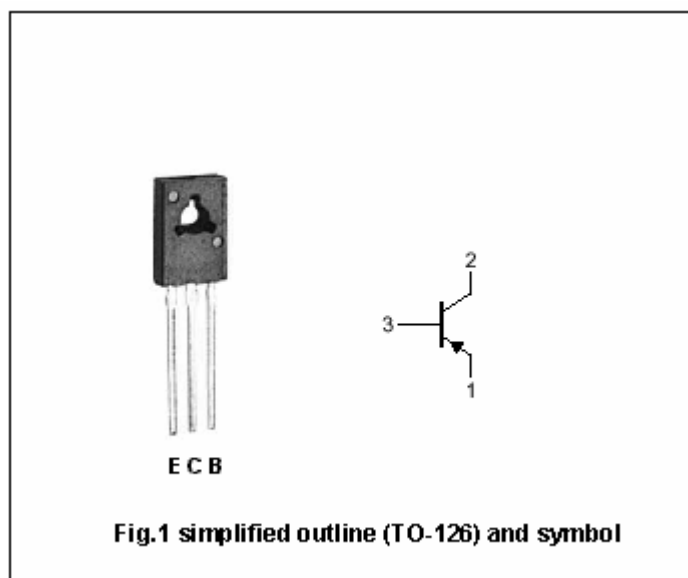
- With TO-126 package
- Low collector saturation voltage
- High DC current gain

APPLICATIONS

- For audio frequency amplifier and switching applications

PINNING

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

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-30	V
V_{CEO}	Collector-emitter voltage	Open base	-30	V
V_{EBO}	Emitter-base voltage	Open collector	-6	V
I_C	Collector current (DC)		-5	A
I_{CM}	Collector current-Peak		-10	A
I_B	Base current (DC)		-2	A
P_T	Total power dissipation	$T_a=25$	0.1	W
		$T_C=25$	10	
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-10mA ; I _B =0	-30			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =-1A; I _B =-50mA			-0.15	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =-2A; I _B =-100mA			-0.25	V
V _{CEsat-3}	Collector-emitter saturation voltage	I _C =-4A; I _B =-200mA			-0.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-1A; I _B =-100mA			-1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =-30V; I _E =0			-0.1	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =-6V; I _C =0			-0.1	μ A
h _{FE-1}	DC current gain	I _C =-1A ; V _{CE} =-2V	150		600	
h _{FE-2}	DC current gain	I _C =-4A ; V _{CE} =-2V	50			
f _T	Transition frequency	I _C =-50mA ; V _{CE} =-10V		95		MHz
C _{OB}	Collector output capacitance	I _E =0; f=1MHz ; V _{CB} =-10V		100		pF

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PACKAGE OUTLINE

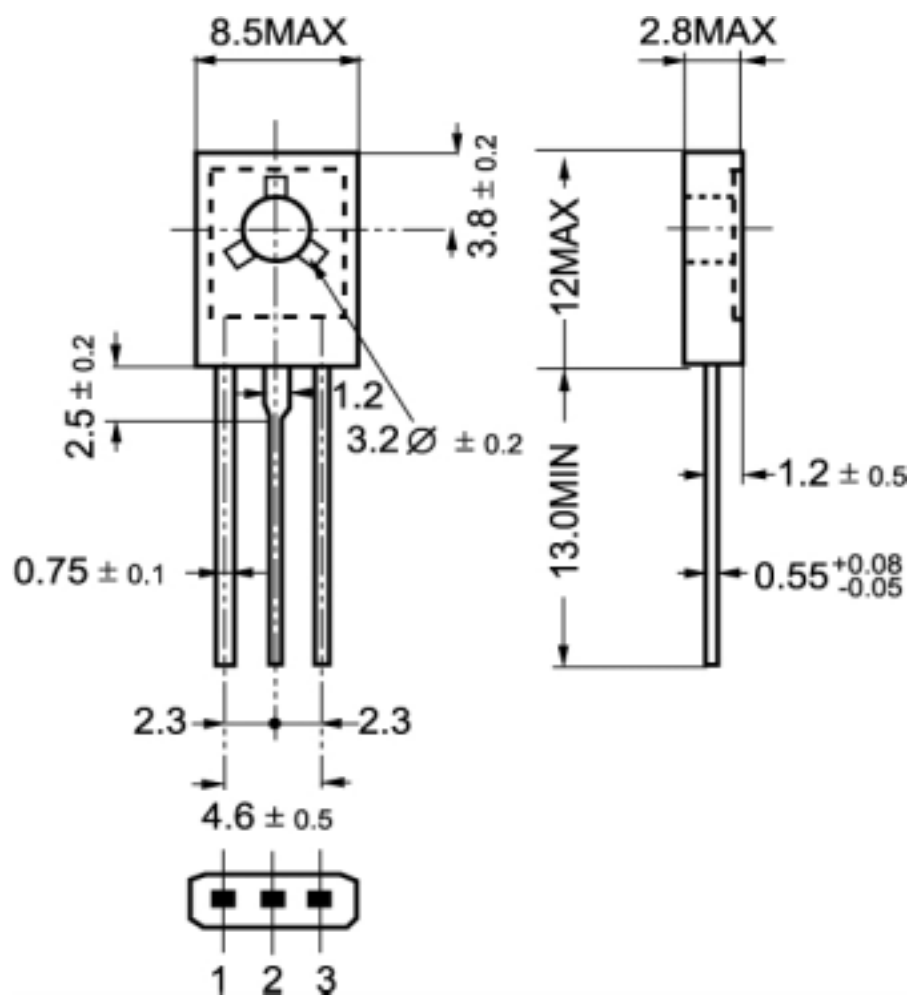


Fig.2 Outline dimensions