

Silicon NPN Power Transistors

2SD1563A

DESCRIPTION

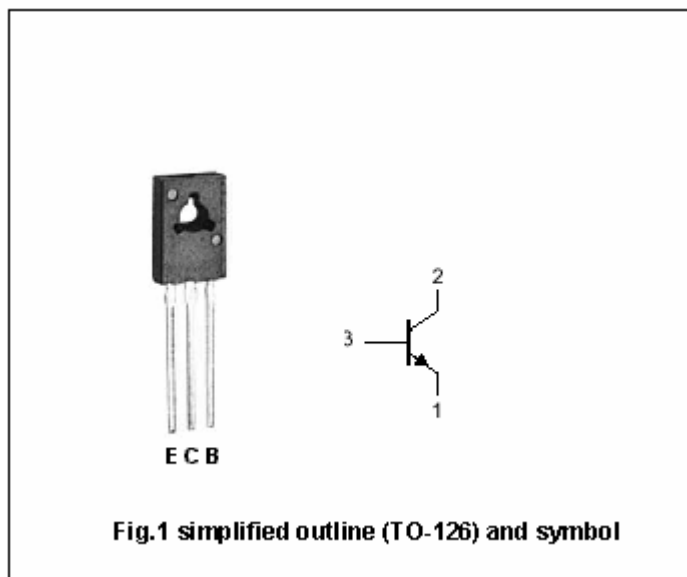
- With TO-126 package
- Complement to type 2SB1086A
- Wide area of safe operation
- High breakdown voltage : $BV_{CEO}=160V(\text{min})$

APPLICATIONS

- For low frequency power amplifier 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	160	V
V_{CEO}	Collector-emitter voltage	Open base	160	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		1.5	A
I_{CM}	Collector current-peak		3.0	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	10	W
		$T_a=25^\circ\text{C}$	1.2	
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 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =1mA ; I _B =0	160			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =50μA ; I _C =0	5			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =50μA ; I _E =0	160			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =1.0A ; I _B =0.1A			2.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =1.0A ; I _B =0.1A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =120V ; I _E =0			1.0	μA
I _{EBO}	Emitter cut-off current	V _{EB} =4V ; I _C =0			1.0	μA
h _{FE}	DC current gain	I _C =0.1A ; V _{CE} =5V	56		270	
f _T	Transition frequency	I _C =0.1A ; V _{CE} =5V		80		MHz
C _{OB}	Output capacitance	I _E =0 ; V _{CB} =10V ; f=1MHz		20		pF

◆ h_{FE} Classifications

N	P	Q
56-120	82-180	120-270

PACKAGE OUTLINE

