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(min)

APPLICATIONS

- For low frequency power amplifier applications

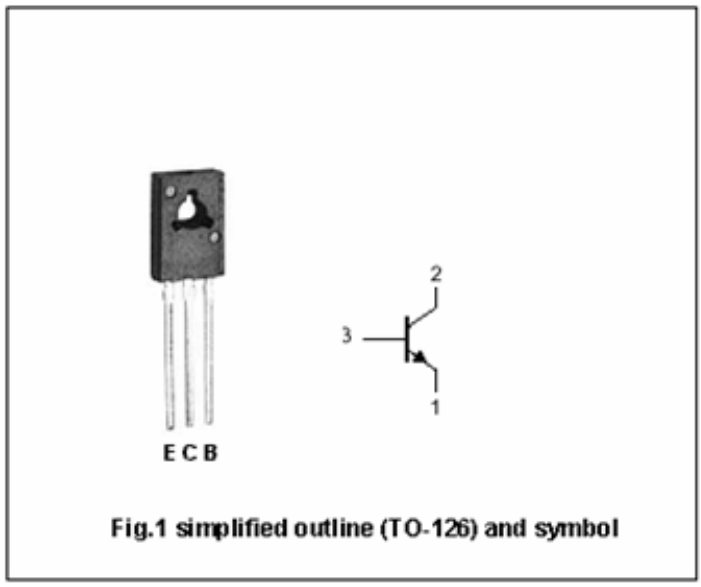

Fig.1 simplified outline (TO-126) and symbol

PINNING

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

Absolute maximum ratings(Ta=25℃)

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℃	10	W
		T_a=25℃	1.2	
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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CHARACTERISTICS

Tj=25℃ 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=50 μ A ;I_C=0	5			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=50 μ A ;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	μ A
I_{EBO}	Emitter cut-off current	V_{EB}=4V; I_C=0			1.0	μ A
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

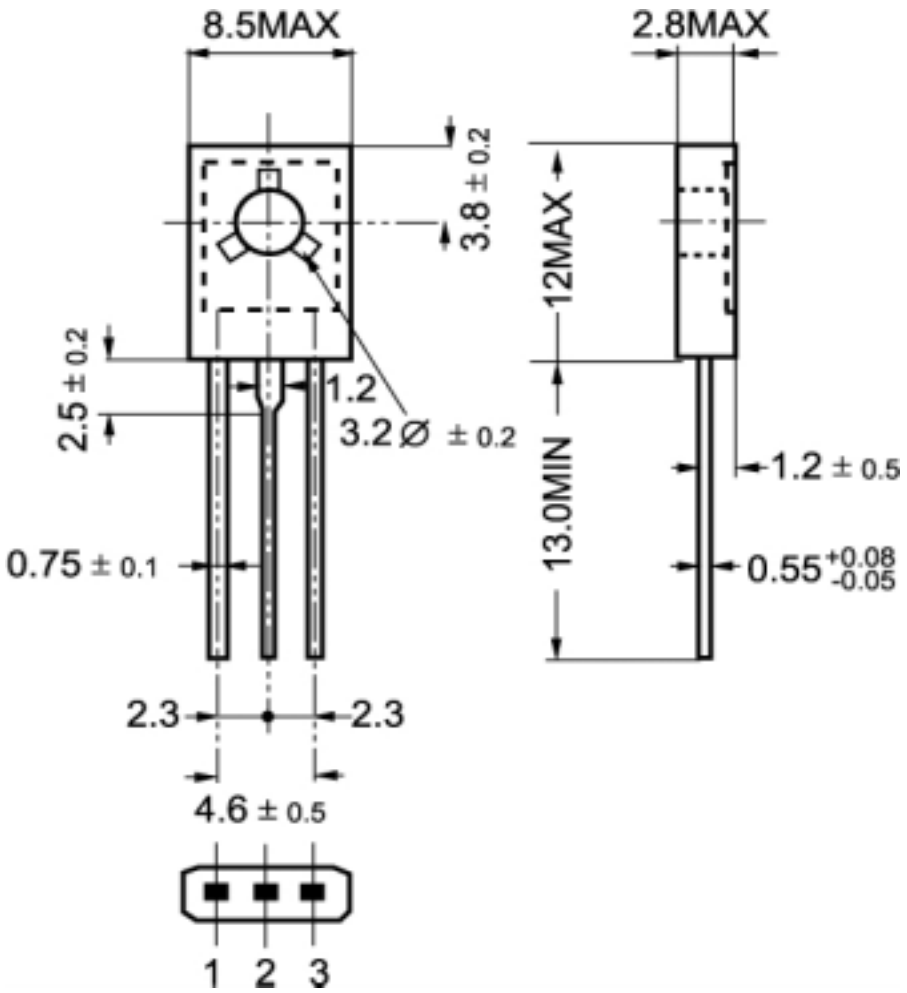

Fig.2 Outline dimensions