

Silicon NPN Power Transistors

2SC1163

DESCRIPTION

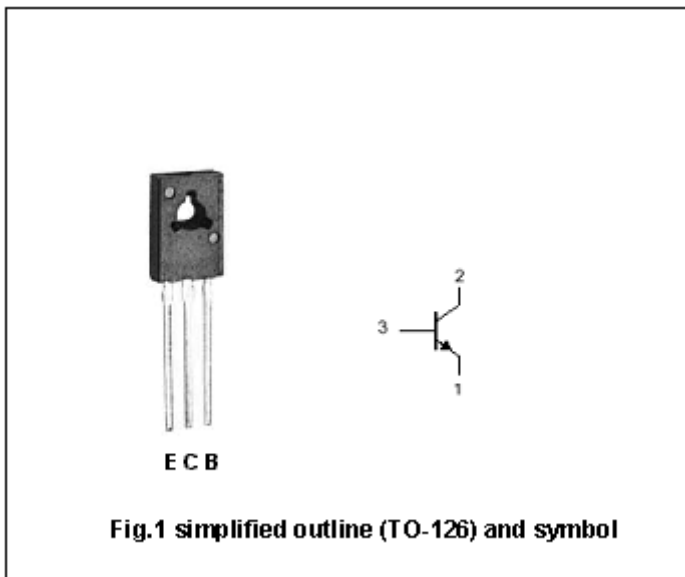
- With TO-126 package
- High power dissipation

APPLICATIONS

- Useful for high-voltage general purpose applications
- Suitable for transformerless ,line-operated equipment

PINNING (see Fig.2)

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



Absolute Maximun Ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	300	V
V_{CEO}	Collector-emitter voltage	Open base	300	V
V_{EBO}	Emitter-base voltage	Open collector	4	V
I_C	Collector current		0.1	A
P_D	Total power dissipation	$T_C=25^\circ C$	20.8	W
T_j	Junction temperature		150	$^\circ C$
T_{stg}	Storage temperature		-65~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th j-C}$	Thermal resistance junction to case	6.25	$^\circ C/W$

Silicon NPN Power Transistors

2SC1163

CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =1.0mA; I _B =0	300			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =100 μ A; I _E =0	300			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =100 μ A; I _C =0	4			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =50mA ; I _B =5mA			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =50mA ; I _B =5mA			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =200V; I _E =0			10	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =3V; I _C =0			10	μ A
h _{FE}	DC current gain	I _C =50mA ; V _{CE} =10V	30		240	

Silicon NPN Power Transistors

2SC1163

PACKAGE OUTLINE

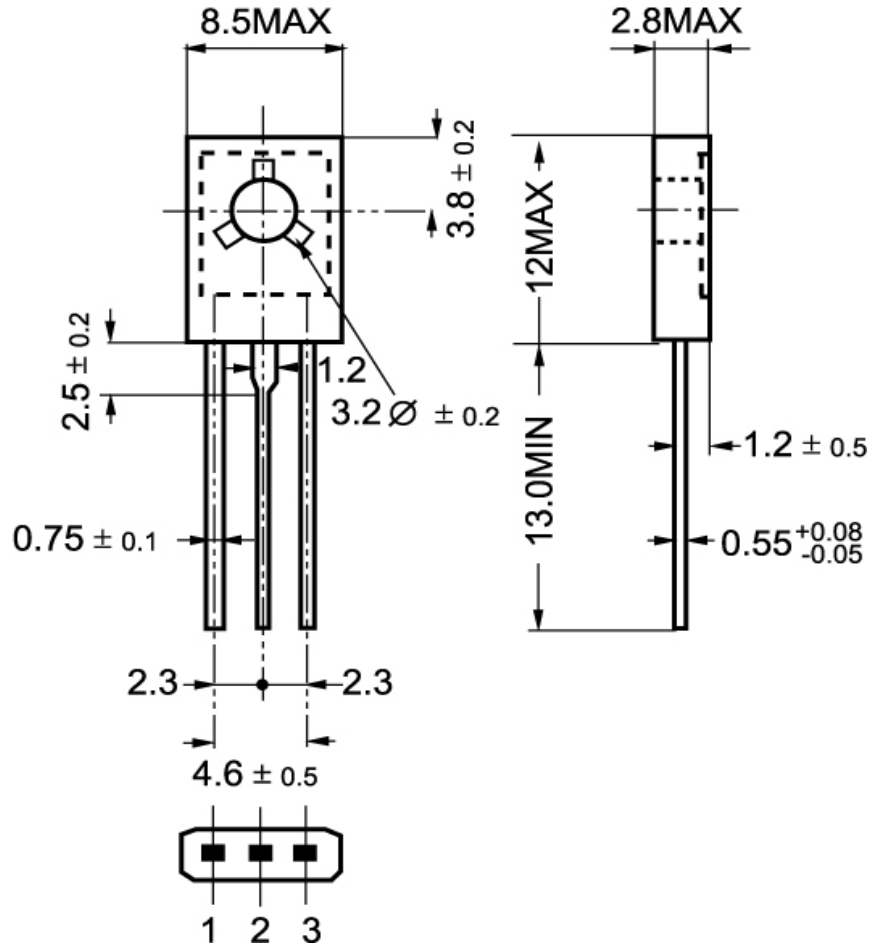


Fig.2 Outline dimensions