

Silicon NPN Power Transistors

MJE340

DESCRIPTION

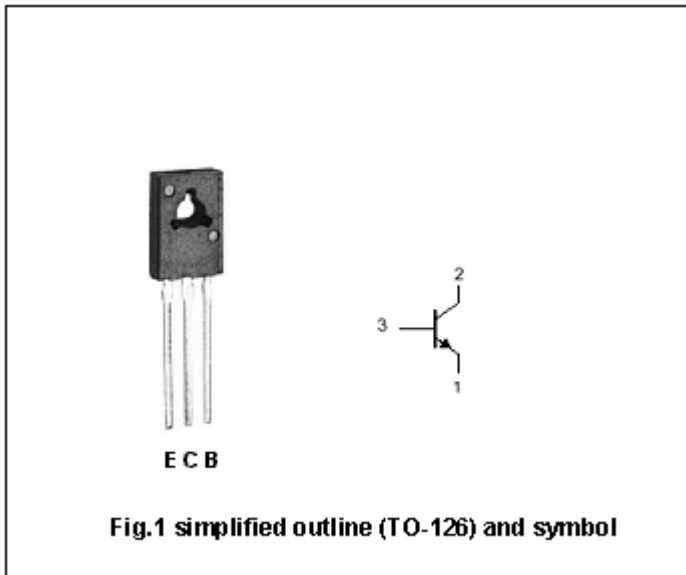
- With TO-126 package
- High power dissipation

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 MAXIMUM RATINGS( $T_c=25^\circ C$ )

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	3	V
$I_C$	Collector current		0.5	A
$P_D$	Total power dissipation	$T_c=25^\circ C$	20	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	$^\circ C/W$

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## CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =1.0mA; I <sub>B</sub> =0	300			V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =100μA; I <sub>E</sub> =0	300			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =100μA; I <sub>C</sub> =0	3			V
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =100mA ; I <sub>B</sub> =10mA			1.0	V
V <sub>BE(sat)</sub>	Base-emitter saturation voltage	I <sub>C</sub> =100mA ; I <sub>B</sub> =10mA			1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =300V; I <sub>E</sub> =0			100	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =3V; I <sub>C</sub> =0			100	μA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =50mA ; V <sub>CE</sub> =10V	30		240	

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PACKAGE OUTLINE

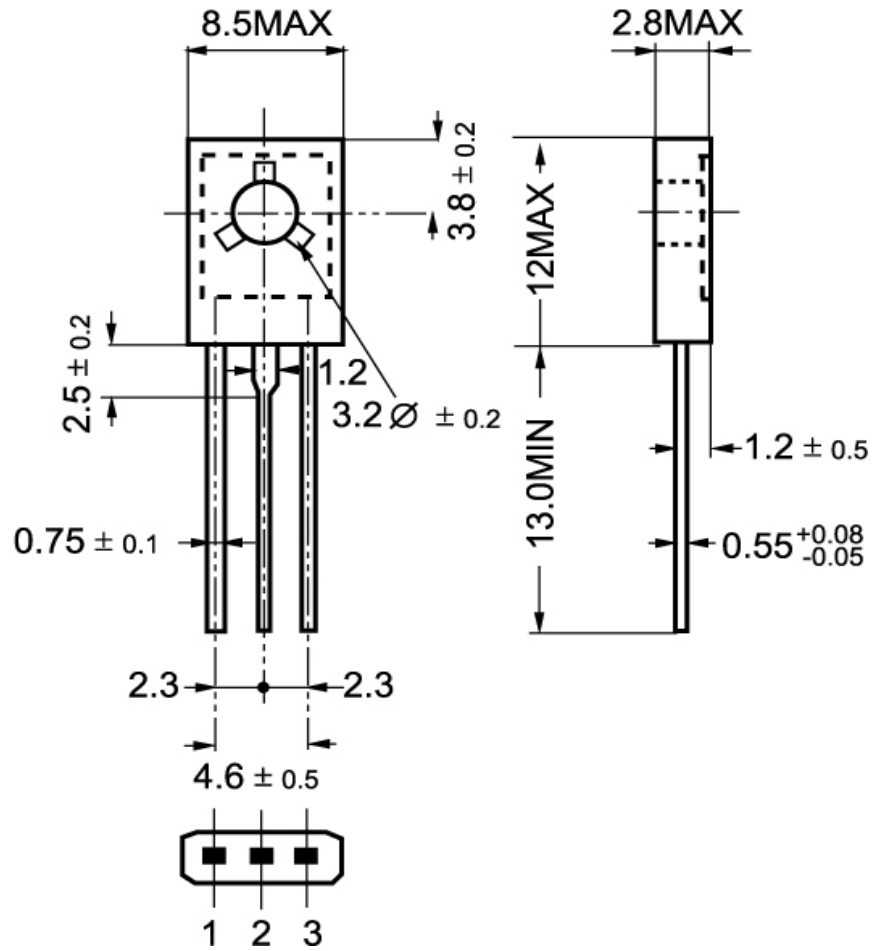


Fig.2 Outline dimensions