

Silicon NPN Power Transistors

2SC2594

DESCRIPTION

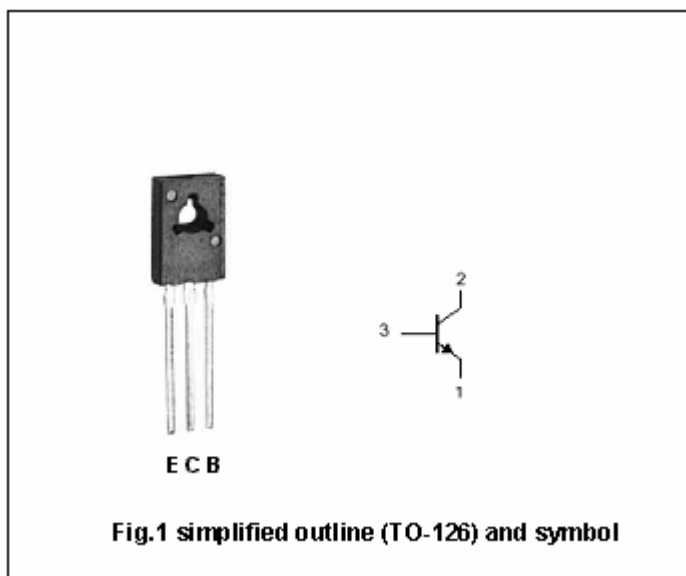
- With TO-126 package
- Low saturation voltage

APPLICATIONS

- AF power amplifier
- For electronic flash unit
- Converter

PINNING

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

ABSOLUTE MAXIMUM RATINGS ($T_C=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	40	V
V_{CEO}	Collector-emitter voltage	Open base	20	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current -DC		5	A
I_{CM}	Collector current-Peak		7	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	10	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1mA$ $I_B=0$	20			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=10\mu A$; $I_E=0$	40			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10\mu A$; $I_C=0$	7			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=3.0A$; $I_B=0.1A$ (Pulse test)			1.0	V
I_{CBO}	Collector cut-off current	$V_{CB}=10V$; $I_E=0$			0.1	μA
h_{FE-1}	DC current gain	$I_C=0.5A$; $V_{CE}=2V$ (Pulse test)	140		450	
h_{FE-2}	DC current gain	$I_C=1A$; $V_{CE}=2V$ (Pulse test)	70			
f_T	Transition frequency	$I_E=50mA$; $V_{CB}=6V$		150		MHz
C_{OB}	Output capacitance	$I_E=0$; $V_{CB}=20V, f=1MHz$			50	pF

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PACKAGE OUTLINE

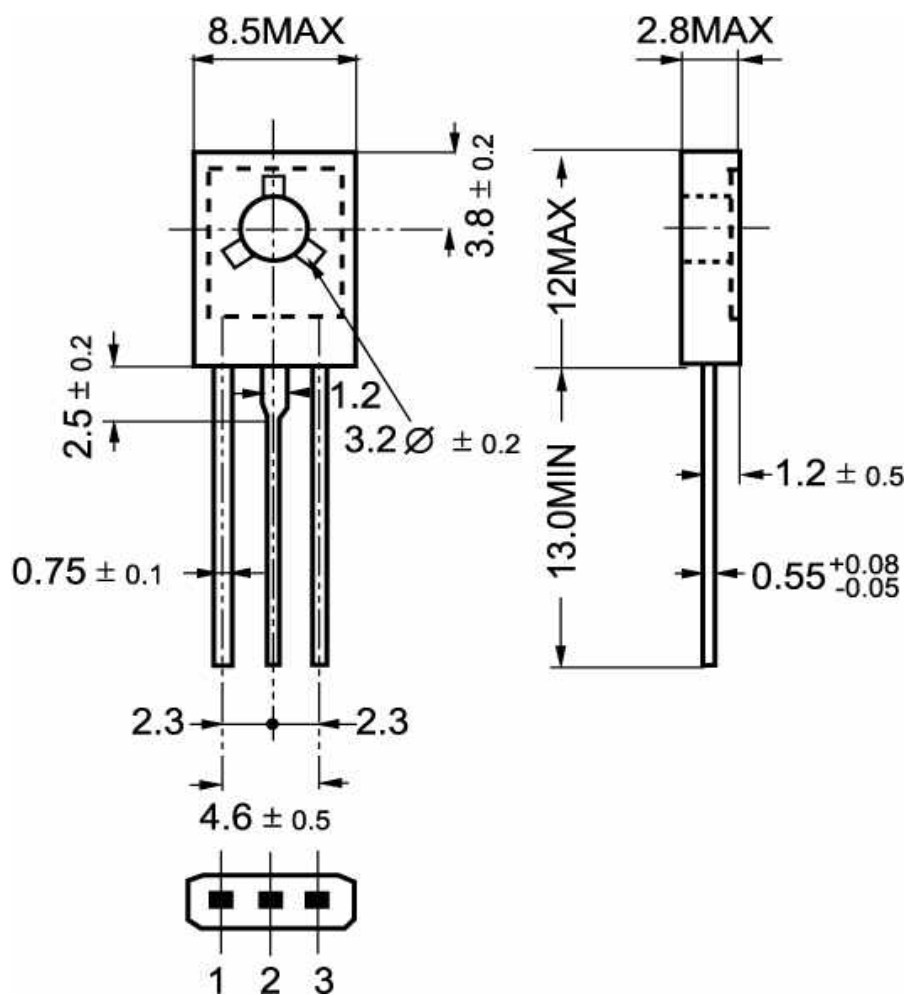


Fig.2 Outline dimensions